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ABSTRACT

Tutoring programs are viewed as being among the most successful of the several programs designed to provide academic support in postsecondary educational institutions for students who have weak formal educational backgrounds. Peer-tutoring programs designed specifically to serve students from educationally deficient backgrounds in postsecondary institutions are rather new and have been implemented in response to the relatively large number of students with weak educational backgrounds who now enter two- and four-year colleges and universities. This document was organized to provide information in the following areas about special peer-tutoring programs in postsecondary institutions: their development, goals and objectives, academic areas for tutoring, funding, selection of peer tutors, training programs for peer tutors, compensation of peer tutors, entry and exit criteria for tutees, tutee-tutor ratios, arrangements for the tutoring, and perceptions of program success. Using data of the above sort, the essential ingredients of peer-tutoring programs are discussed. A directory of tutoring programs for educationally deficient students surveyed in this study has been provided. (Author/KE)

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Peer-Tutoring Programs for the Academically Deficient Student in Higher Education

RODNEY REED

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In seeking knowledge, the first step is silence, the second listening, the third remembering, the fourth practicing, and the fifth--teaching others.

Ibn Gabirol

I. Introduction and Purpose

Tutoring programs are viewed as being among the most successful of the several programs designed to provide academic support for students who have weak formal educational backgrounds in postsecondary educational institutions. These programs are also thought to be very successful in elementary and secondary schools. Tutoring programs appear to be particularly effective at the grade levels when other students--peers--are used as tutors.[1]

Tutoring arrangements that use peer tutors have resulted in positive benefits for tutors and tutees: Tutors tend to reinforce their own knowledge when they prepare material to teach someone else, their self-confidence and self-esteem are enhanced, they develop teaching skills and techniques, and they are given financial assistance. Tutees receive individualized instruction, have opportunities to interact with students who may have overcome similar problems and therefore to discover and reinforce their own unique strengths, and they are given an important boost toward self-confidence in addition to consistent exposure to a role model.

Peer-tutoring programs are not new. Formal and informal arrangements for tutoring in postsecondary institutions have existed for some time, but usually as either a campuswide service for all students, or available only to students who could afford to pay for private individual tutoring sessions. However, peer-tutoring programs designed specifically to serve students from

educationally deficient backgrounds in postsecondary institutions are rather new and have been implemented in response to the relatively large number of students with weak educational backgrounds who now enter two- and four-year colleges and universities.

Although the growth of peer-tutoring programs in postsecondary institutions over the past few years has been substantial, little information has been systematically collected about them. Also, empirical evidence of the success of these programs over time is virtually nonexistent. In part, the latter condition can be attributed to the relative newness of these programs and in part to the lack of resources necessary to systematically examine their effectiveness. While hard data are desirable in both of the above areas, this study focuses upon the former: the characteristics of peer-tutoring programs in postsecondary institutions.

The present survey has been designed to provide descriptive information about peer-tutoring programs for the educationally deficient in order to assist postsecondary institutions that may wish to implement these programs, and to provide baseline data that may be useful for future studies. Additionally, the data presented in this study should be useful in assessing the direction and organization of programs already in existence.

This survey was organized to provide information in the following areas about special peer-tutoring programs in postsecondary institutions: their development, goals and objectives, academic areas for tutoring, funding, selection of peer tutors, training programs for peer tutors, compensation of peer tutors, entry and exit criteria for tutees, tutee-tutor ratios, arrangements for tutoring, and perceptions of program success. Using data of the above sort, the essential ingredients of a peer-tutoring program are provided. Finally, considerations for evaluating peer-tutoring programs are discussed.

A directory of tutoring programs for educationally deficient students surveyed in this study has been provided for those who may wish to contact individual program directors, and is included in Appendix A.

DESCRIPTION OF THE SURVEY

During the 1972-73 academic year questionnaires (see Appendix B) were mailed to a geographically representative sample of 110 two- and four-year colleges selected from those identified as having special tutoring programs for educationally deficient students. Seventy-eight institutions responded for a return rate of 71 percent. Of the 78 institutions that responded, 64, or 58 percent, reported the existence of a special tutoring program that, except in two instances, used peer tutors. The 14 other responses received either had no tutoring program or had a general campuswide program with no attempt made to assist educationally deficient students. Table 1 (page 4) provides a summary of the distribution of questionnaires mailed and received.

Interviews (see Appendix B) were conducted at 20 institutions that were selected from questionnaire responses on the basis of: the number of tutees served (more than 75), the size of the program budget ($15,000 and above), the length of time the program had been in existence (minimum of two years), geographical location of the institutions (diverse), institutional type (two- or four-year), and the ethnic diversity of the tutees served in the program (Black, Chicano, Native American, Puerto Rican, Asian, and White). Table 2 (page 5) summarizes the distribution of institutions selected for interviewing on the basis of geographical location and college type.

Interviews at each institution were conducted to provide a deeper view of the information reported on the questionnaire and, importantly, to obtain the views held about the tutorial program from college administrators, peer-tutoring program administrators, faculty

Table 1
QUESTIONNAIRE RESPONSES

	Geographical Location									
	Northeast		Midwest		Southeast		Southwest		Far West		Combined Total	
	N	%*	N	%	N	%	N	%	N	%	N	%
Questionnaires mailed	31	(28%)	10	(9%)	9	(8%)	15	(14%)	45	(41%)	110	(100%)
Questionnaires returned	22	(20%)	7	(6%)	6	(5%)	9	(8%)	34	(30%)	78	(71%)
No response	9	(8%)	3	(3%)	3	(3%)	6	(5%)	11	(10%)	32	(29%)
Colleges reporting peer-tutoring programs	15	(14%)	8	(7%)	6	(5%)	7	(6%)	28	(26%)	64	(58%)
Colleges reporting no special tutoring programs	5	(5%)	2	(2%)	2	(2%)	2	(2%)	3	(3%)	14	(13%)

* Percentages rounded off

Table 2
INTERVIEW SURVEY DISTRIBUTION BY GEOGRAPHICAL AREA
AND COLLEGE TYPE

	Geographical Location					
Type College	Northeast	Midwest	Southeast	Southwest	Far West	Combined Total
Two-year	3 (15%)	2 (10%)	1 (5%)	2 (10%)	4 (20%)	12 (60%)
Four-year	2 (10%)	1 (5%)	1 (5%)	2 (10%)	2 (10%)	8 (40%)
N =	5 (25%)	3 (15%)	2 (10%)	4 (20%)	6 (30%)	20 (100%)

members, peer tutors, and tutees. In addition to the interviews conducted, information about the program was gained from examination of existing documents at each institution.

The sample of institutions included in the survey study was deliberately selected to insure representativeness. The findings reported may therefore have limited applicability. The intent was not to generalize the findings to all two- and four-year colleges but to provide general information about the relatively new phenomenon of peer-tutoring programs that is appearing in institutions that serve many students from educationally deficient backgrounds.

The data collected were both quantitative and qualitative. The analyses of those data reflect a synthesis of interviews, staff observations, and questionnaire responses.

II. Results of the Survey

The recent emergence of peer-tutoring programs for the educationally deficient student appears to have been rather spontaneous. How and why these programs came about and how they are viewed within the institutions that house them are areas with which this survey is concerned. From the analysis and synthesis of questionnaire and interview data we discuss: the development of peer-tutoring programs, the goals held for them, the academic subjects in which tutoring most frequently occurs, program budgets, tutor selection, training and compensation, program entry-and-exit criteria for tutees, the number of tutees served through the programs, and the arrangements used for tutoring. A description of program directors is included and this chapter concludes with an analysis of the perceptions held by selected individuals and groups within the survey institutions about peer-tutoring programs.

THE DEVELOPMENT OF PEER-TUTORING PROGRAMS

Most peer-tutoring programs surveyed were established in 1970 or 1971. Only one program was started as early as 1964 and a few were established in 1968 and 1969. Apparently the establishment of most programs is associated with the increase in students who are educationally deficient in basic college courses.

Impetus for establishment of most of the programs came from college administrators, but some grew out of

the efforts of faculty members, counselors, and students. Certain programs also resulted from the combined efforts of all of the above groups.

Significantly, most programs (64 percent) were initiated as regular, autonomous programs. Other programs grew out of or continue to be an adjunct to such existing student support programs as EOP, Upward Bound, Special Services for Disadvantaged Students, and general campuswide tutorial services.

The greatest obstacle to the implementation of peer-tutoring programs has been financial. Fifty-five percent of the program directors interviewed report that lack of funds was the primary obstacle in implementing these programs. Additionally, most of the program directors felt that because of present limited funding the programs did not currently provide tutoring for many students who could benefit from this service. Evidently obtaining funds to support peer-tutoring programs at desirable levels from existing institutional resources or from external funding sources is frequently frustrating and difficult, if not impossible. Other obstacles encountered in implementing peer-tutoring programs were, in order of importance: faculty support, academic standards, committee approval, and adequate space.

The above obstacles were eliminated or reduced substantially by scaling down the size of proposed peer-tutoring programs and by convincing faculty members that these programs were not designed to jeopardize their teaching authority or position but rather to provide additional help for many students. The success experienced in removing the critical barriers to program implementation reported above attests to the skill and determination of program directors and other college administrators--qualities that are essential for the implementation of most new programs.

Despite the obstacles, peer-tutoring programs appear to have gained in popularity and are thought to be rather effective in providing for the academic needs

of students who, because of inadequate educational backgrounds, experience academic difficulty in the college setting. To accommodate these programs, several institutions have expanded their facilities to include complete learning centers or tutorial laboratories. It is likely that many other institutions will also establish such centers when resources permit.

PEER-TUTORING PROGRAM GOALS

College administrators, program directors, faculty members, tutors, and tutees associated with the programs surveyed are generally in agreement about the goals of peer-tutoring programs. These goals, ranked on the basis of frequency of response, are listed in Table 3 below.

Table 3

TUTOR PROGRAM GOALS*

No.	Goal
1	To provide academic support for students who lack the educational background for college work.
2	To ensure student retention in college and subsequent graduation
3	To help students develop self-concept
4	To help students develop self-confidence and reduce feelings of fear of failure
5	To improve human relations and the sense of campus community among students
6	To provide individualized help
7	To provide help in developing study skills
8	To improve academic performance
9	To improve basic skills in reading and the use of language
10	To help students adjust to college

*Based on interviews with program directors, college administrators, faculty members, peer tutors, and tutees.

Although the above program goals reflect considerable agreement, one program director responded to the interview question regarding goals by stating, "Well, that's nuts and bolts, and I really don't know." Atypical as this was, it does indicate that at least one institution implemented a peer-tutoring program to give the impression of responding to the academic needs of educationally deficient students, but without formulating the goals necessary to make this a viable program for these students. In fact, additional interviews at this institution revealed that the tutoring program for the educationally deficient student was initiated to quiet demands from these students for some sort of academic support.

Examination of the list of goals presented in Table 3 would seem to indicate that the first goal, "To provide academic support for students who lack the educational background for college work," and the eighth goal, "To improve academic performance," are the same. This is not the case. The first goal refers to providing basic general support. The eighth goal is concerned with improving the academic performance of students who are performing at academically successful levels but who may be capable of doing better work. This latter goal is important in helping students to achieve at levels commensurate with their ability and interest.

The success of peer-tutoring programs in accomplishing the goals held for them is not well documented. None of the programs included in the interview phase of this investigation had conducted systematic evaluations of the degree to which the goals held for the program had been met. Most persons interviewed, however, believed that their programs were effective and appeared to base this belief on a student-retention criterion. Students whose educational qualifications upon entry into college are minimal but who survive academically and remain in college represent the success of tutoring programs. Most interviewees felt that the retention rate for these students had improved and associated that improvement with the success of their programs in meeting their stated goals. With little doubt, student retention is an

indicator of program effectiveness. What is not clear, however, is whether student retention is attributable primarily to tutorial programs or to other influences on or off college campuses.

ACADEMIC SUBJECTS FOR TUTORING

Tutoring is generally provided in any academic area requested by tutees if tutors are available and the budget permits employing them. On the basis of the greatest number of tutees served, the two top academic areas requested are communication skills (including English, reading, writing, and speech) and mathematics. In descending order after these are: life sciences, physical sciences, psychology and sociology, business and economics, social sciences, history and philosophy, and languages. The number of programs reporting these academic areas as used by tutees is displayed in Table 4 below.

Table 4

ACADEMIC SUBJECTS FOR TUTORING
Ranked by Tutee Use

Subject Area \ Rank	Rank Order by Tutee Use					
	1	2	3	4	5	6
1) Communication skills*	28	18	9	8	9	4
2) Mathematics	18	19	11	6	1	2
3) Life sciences	4	1	13	6	5	4
4) Psychology/Sociology	1	2	2	2	4	4
5) Business/Economics	1	3	3	2	6	5
6) Social sciences/ History/Philosophy	-	3	5	6	6	3
7) Languages	-	1	6	3	7	3
8) Other**	-	-	1	1	2	6

*Communication skills include English, reading, writing, and speech.

**Other includes nursing, engineering, political science.

It is not surprising that the largest number of tutees request help in communication skills and mathematics rather than in other academic areas. Basic communication and computational skills are viewed by many as being fundamental requisites to college success. Consequently, these areas may receive the greatest use because of faculty and counselor encouragement or because students themselves recognize the necessity of successfully completing basic required academic subjects if they are to remain in college.

THE MATTER OF MONEY

The operating budgets of the tutoring programs surveyed ranged from $110 to $250,000 with a mean average of $36,987 and a median of $16,791. As noted in Table 5, however, the majority of programs had budgets within the $5000 to $14,999 range.

Table 5

BUDGET ALLOCATIONS FOR TUTORIAL PROGRAMS

Size of Budget*	Number of Colleges Reporting
Less than $ 4,999	11
$5,000 - 14,999	17
15,000 - 24,999	8
25,000 - 34,999	3
35,000 - 44,999	2
45,000 - 54,999	3
55,000 - 64,999	3
65,000 - 74,999	1
75,000 - 84,999	4
85,000 - 94,999	1
95,000 - 104,999	1
105,000 - 199,999	2
200,000 +	2
No response	6
N=	64

*Mean = $36,987
Median = $16,791

The major sources of operating funds for tutorial programs at most institutions were, in descending order: local resources such as institutional funds, faculty donations, student fees, and foundation grants, and federal and state governments. Other institutions reported that operating funds were secured through various combinations of local, federal, and state sources, as shown in Table 6.

Table 6
SOURCE OF FUNDS FOR TUTORIAL PROGRAMS

Source	Number of Colleges Reporting
Federal	12
State	11
Local	13
Institutional funds	
Faculty donations	
Student fees	
Foundation grants	
Federal and state	8
Federal and local	5
State and local	6
Federal, state, and local	8
No response	1
N =	64

Regardless of the source of funds, 60 percent of the program directors interviewed felt that existing operating budgets were inadequate. Most of these directors stated that additional funds were needed to obtain tutors, equipment, and books and materials. Other directors stated that higher pay for tutors, greater use of computer services, improved facilities, and program evaluation were needs that would also be satisfied by increases in

their operating budgets. Unfortunately, very few program directors believed that additional operating funds for tutorial programs were forthcoming. Indeed, in several instances program allocations were being decreased because of the withdrawal of external funds and the institutions were unwilling or unable to continue support of the program at the existing level of funding. Clearly, if tutorial programs are to survive, more permanent funding arrangements must be found.

SELECTING PEER TUTORS

Most programs select tutors on the basis of grade-point average (usually an A or B in the course in which tutoring is to be done and an overall GPA of 3.0, or B). Other criteria are: demonstrated proficiency, sensitivity, understanding, ability to relate to all students, financial need, faculty recommendation, voluntary association, department chairman recommendation, former tutee status, and graduate student status. Although most programs report the use of a specific selection criterion (see Table 7) many programs select tutors on the basis of several criteria.

Table 7

CRITERIA USED TO SELECT PEER TUTORS

Criteria	Number Programs Using
GPA (at least 3.0 or B)	38
Demonstrated proficiency	21
Sensitivity, understanding, and ability to relate to all students	18
Financial need	17
Faculty recommendation	16
Voluntary association	13
Department chairman recommendation	3
Former tutee status	1
Graduate student status	1
No response	5
N =	64

One institution gives highest priority to former tutees because of the empathy and understanding they can bring to the problems of peers in need of academic help. To the extent that peer tutors selected on criteria other than GPA are successful, the practice of selecting mainly high-achieving students is brought into question. Evaluation of peer tutors selected by differing criteria is therefore a subject for further investigation.

Peer tutors for most programs are chosen by program directors, with varying amounts of evaluation and information given by faculty members, staff, and students. A number of programs, however, indicated that either faculty members, academic department heads, faculty and students, or an honorary campus organization selected them (see Table 8).

Table 8

PERSON(S) SELECTING PEER TUTORS

Person(s) Selecting	Number Programs Reporting
Program director or coordinator	27
Program director and academic department liaison	10
Academic department faculty	6
Program director and staff	5
Program director and student coordinators (tutors)	4
Academic department heads	3
Screening committee	1
Faculty and students	1
Honorary campus organization	1
No response	6
N =	64

The final decision to select a peer tutor is an important one. To ensure that peer tutors meet the various criteria used, it is desirable to obtain input from several sources, such as those displayed in Table 8. The use of these sources is limited only by a lack of effort.

Every institution reported that the supply of potential peer tutors exceeded the demand, except in a few instances where securing tutors for night classes at commuter colleges presented logistical problems. This evidently resulted from a lack of personnel to coordinate requests for peer tutoring and the selection of peer tutors for late evening students. Clearly, peer-tutoring programs for night students at commuter colleges should be given greater attention.

TRAINING PEER TUTORS

Most of the programs surveyed reported some type of arrangement for training peer tutors. The basic characteristics of these arrangements are summarized in Table 9. Generally conducted by the program director or faculty members, or both, these took the form, in most instances, of from one to five hours of initial training, a special program during the summer, or a special course during the school year.

Initial training sessions generally cover a combination of orientation, tutoring techniques, program philosophy and objectives, special tutee needs, tutor responsibilities and duties, handling special problems (e.g., financial, reading, faculty-tutee conflict) that may need to be referred to the professional staff, interpersonal relations, diagnostic techniques, community and college resources, and the use of special equipment.

Following the initial training sessions, periodic follow-up meetings are held in some programs with the program director to discuss problems encountered and solutions to them. In other programs meetings are held between tutors and instructors of tutees. One program

Table 9

SELECTED CHARACTERISTICS OF PEER-TUTOR TRAINING PROGRAMS

Characteristic	Number Programs Reporting
I. Content of initial tutor training program*	
A. General orientation	12
B. Tutoring techniques	11
C. Program philosophy and objectives	9
D. Tutee special needs	6
E. Tutor responsibilities and duties	5
F. Handling special problems	5
G. Interpersonal relations	5
H. Diagnostic techniques	3
I. Community and college resources	3
J. Use of special equipment	3
II. Length of initial tutor training program	
A. Less than 1 hour	2
B. 1-2 hours	10
C. 3-4 hours	4
D. 5-6 hours	1
E. 10 hours	1
F. 18 hours	1
G. 6 days (hours not indicated)	1
H. 1-2 sessions (length of sessions not indicated)	5
I. 1-4 weekly sessions (length of sessions not indicated)	7
J. 1-2 sessions before semester (length of sessions not indicated)	2
K. 1-2 weeks before semester during summer	1
L. 1 semester of weekly classes	4
III. Follow-up activities after initial tutor training (Focused on problems encountered by tutors)	
A. Tutor meetings/conferences with director	12
B. Tutor weekly sessions with director	6

Table 9
(continued)

Characteristic	Number Programs Reporting
C. Meetings between instructor of tutee and tutor periodically	5
D. Quarterly meetings of tutors with director	3
E. Monthly tutor in-service program	1
F. Daily tutor training course	1
G. Optional tutor class	1
H. Review of videotapes of tutoring sessions	1
IV. Person(s) conducting tutor training sessions	
A. Program director/coordinator	15
B. Faculty members	6
C. Program director and faculty	4
D. Program staff and faculty	3
E. Program staff	2
F. Program director and director of reading	2
G. Program director, faculty, counselors	1
J. Program director, faculty, advanced peer tutors	1
K. Program director, reading specialist, counselor, experienced or advanced peer tutor	1
N =	39

*Many programs include several of these areas in the initial training program.

reported the use of video tapes of the tutoring session in analyzing tutor effectiveness.

Some programs conduct either weekly or quarterly follow-up sessions for tutors, but the majority schedule follow-up sessions only when necessary. One program reported holding a daily tutor training course and another conducts an optional tutor class regularly scheduled during the school year.

Many programs have no formal training program. In these programs, new peer tutors are informally assisted by experienced ones but are for the most part forced to rely on their own resources. Although much time may be wasted in trying to discover effective tutoring strategies without the benefit of a formal training program, program directors and tutees expressed great satisfaction with the performance of peer tutors whether they had undergone formal training or not. It is important to note, however, that this satisfaction might be related to the fact that no comparative judgments could be made within institutions since those surveyed had either trained or untrained peer tutors, never a combination of both.

Two examples of training programs for peer tutors are briefly described below.

Program A

This program has a training session of six to eight weeks in the summer preceding the regular academic year. During this period, attention is focused on helping the peer tutor define his or her needs, methods of problem solving, and mini-teaching sessions. Additionally, peer tutors role play and critiques are provided by other peer tutors as well as by the professional staff. Some use of video-visual equipment is included in the training sessions. These training sessions familiarize peer tutors with good teaching techniques, increase their self-confidence, and acquaint them with equipment and procedures that facilitate the tutoring process.

One of the unique features of this training program is the process of development from the initial selection of the peer tutor to the actual tutoring stage. In this process, the selected peer tutor is initially designated an apprentice tutor, after completing the training program described above. As an apprentice tutor, he or she observes master tutors for a period of approximately one-half year. The apprentice tutor is then advanced to the tutor level for an unspecified period of time while receiving additional help and training from the professional staff and master tutors. Classified as a tutor, the peer tutor functions independently and the program director is assured that those reaching the final level are well-trained, experienced, and effective.

Another aspect of the training program at this institution is that faculty members in various academic disciplines meet with peer tutors to discuss individual problems of tutees and to suggest techniques of working with them. However, the formal training program described above is conducted by the director of the tutorial program, the reading specialist, counselors, and experienced or master tutors.

Program B

During the initial training period new peer tutors work with experienced ones observing their tutoring techniques. Faculty members and assistant instructors in the tutoring center give instruction to peer tutors on the following topics:

1) test administration
2) evaluation of diagnostic tests
3) terminology in reading

In addition, each peer tutor receives a policies and procedures manual with which he or she is urged to become familiar.

Continual training during the school term consists of frequent laboratory staff meetings to discuss specific problems and to review goals and procedures of the tutoring center. Each tutor also meets at frequent intervals with a faculty member who evaluates his or her work, discusses the progress of tutees being helped by that tutor, and gives additional training whenever necessary.

TUTOR COMPENSATION

By far the most widely used form of compensation for tutors is financial; pay scales range from $.75 to $8.00 per hour. Most programs (67 percent) compensate peer tutors at the rate of $1.65 to $2.95 per hour. A few programs have pay scales differentiated on the basis of academic and paraprofessional classification. As displayed in Table 10 the general range of these pay scales is from $1.10 per hour for sophomores to $8.00 per hour for paraprofessionals.

Another form of compensation used by two of the programs surveyed is academic credit. Generally, tutors can earn one or two units of academic credit per quarter or semester. In such instances, normal classroom record-keeping procedures and monitoring are provided by appropriate academic staff in association with the director of the tutorial program. While this option has merit, especially for institutions with limited funds, most peer tutors indicate that they prefer financial compensation, particularly if additional money is needed for college expenses. In contrast, the opportunity for students to earn academic credit by engaging in an activity such as tutoring that may provide professional growth and personal satisfaction is an attractive option.

PROGRAM ENTRY AND EXIT CRITERIA FOR TUTEES

The majority of peer-tutoring programs surveyed had no entry requirements for tutees; these programs were

Table 10

TUTOR COMPENSATION

Compensation		Number of Colleges Reporting
Financial hourly:	$ .75-$1.59 per hr.	1 (1.5%)
	1.60- 1.99	20 (31.2%)
	2.00- 2.99	23 (35.9%)
	3.00- 3.99	8 (12.5%)
	4.00- 4.99	- -
	5.00+	1 (1.5%)
Financial scale: A. $3.00-$8.00 per hr. (including paraprofessionals)		1 (1.5%)
B. Sophomore	$2.10 per hr.	1 (1.5%)
Juniors & Seniors	3.00	
Graduates	4.00	
Paraprofessional	5.50	
C. Undergraduates	3.05-3.55 per hr.	1 (1.5%)
Graduates	4.05	
D. Sophomores	2.25 per hr.	1 (1.5%)
Juniors	2.50	
Seniors	2.75	
Graduates	3.00	
E. Undergraduate	2.60 per hr.	1 (1.5%)
Graduates	3.36	
Academic credit (1-2 units)		2 (3.1%)
Voluntary		1 (1.5%)
No response		3 (4.6%)
N =		64 (100%)

available to students at their request. Other programs were mandatory for students on academic probation, with low-placement test scores, or with an overall GPA below 2.0, or C.

In several other programs, faculty members and counselors encouraged students to seek or referred them to tutorial help. Since such referrals or encouragement are rarely ignored by students, these may also be viewed as a mandate, although the decision to obtain tutorial help is optional. A summary of the criteria used for tutee entry is provided in Table 11.

Table 11

SELECTION CRITERIA FOR TUTEES

Selection Criteria	Number Programs Reporting*
Voluntary (no entry requirement)	49 (76.5%)
Faculty or counselor referral	27 (42.1%)
Mandatory for students earning below C-average at end of 1st semester	11 (17.1%)
Mandatory for students earning low score on standardized test** at college entry	7 (10.9%)
Mandatory for students in special services program	2 (3.1%)
No response	2 (3.1%)
N =	64

*Number of programs reporting does not add to 64 due to the use of more than one criterion by some programs.

**Standardized tests used include: California Achievement Test, Nelson-Denny Reading and English Test, California Reading and Language Tests.

Generally, seeking tutorial help is self-initiated. Although the psychological implications of that fact were not made explicit in the interview data, they are clearly of critical importance: Students who seek help are likely to have a strong desire to succeed, and their efforts to translate that desire into success may be as important as the help received from tutors.

Several criteria, as indicated in Table 12, are used to signify the completion of the tutoring program.

Table 12

PROGRAM EXIT CRITERIA FOR TUTEES

Exit Criteria	Number Programs Reporting*
Demonstrated proficiency	38 (59.0%)
Automatic at end of semester or quarter	11 (17.1%)
When recommended for advanced work	7 (10.9%)
Voluntary exit	9 (14.0%)
Satisfy contract	1 (1.5%)
No response	3 (4.6%)
N =	64

*Number of programs reporting does not add to 64 due to the use of more than one criterion by some programs.

Most programs require tutees to demonstrate some degree of proficiency in the area in which tutoring has been received. In some, tutees are required to pass a test in developmental reading or in the academic subject in which they are being tutored. At one institution, tutees are required to pass a 12th-grade reading test. Others require the successful completion of the regular

freshman English course. At other institutions, tutees remain in the tutoring program until they are recommended for advanced work by the regular instructor of the class for which tutoring is received. In yet another program the tutee has to satisfy a learning contract made with the tutor.

Some programs permit tutees to exit at the end of the quarter or semester in which they enter; others permit tutees to exit whenever they wish, although this arrangement does not ensure that tutees have acquired a better understanding of the academic subject for which tutoring is received. The general assumption, however, is that tutees will not leave the program until they have obtained the level of knowledge and understanding necessary to perform satisfactorily in their academic courses.

Specific exit criteria for tutorial programs are as varied as the number of institutions that have programs; no clear pattern emerged from this survey although most programs required some form of demonstrated proficiency before tutees were permitted to leave.

NUMBER OF TUTEES SERVED

The number of tutees in the tutorial programs surveyed ranged from 9 to 1100. Thirty-four percent of the sample reported serving 9 to 100 tutees and 31 percent reported serving 101 to 200 tutees. Only 8 percent of the programs served 201 to 300 tutees and not many served more than 300, as can be seen in Table 13. Five percent of the sample did not know how many tutees were served.

The unanimous opinion of all interview and questionnaire respondents was that the existing tutorial programs failed to serve as many students as they should. Several reasons were advanced: Many students do not avail themselves of the program because they feel it is exclusively for students designated as special services students. Many students are not aware of the existence

Table 13

SUMMARY OF NUMBER OF TUTEES SERVED

Number of Tutees	Number of Programs
1 - 100	22 (34%)
101 - 200	20 (31%)
201 - 300	5 (8%)
301 - 400	4 (6%)
401 - 500	2 (3%)
501 - 600	1 (2%)
601 - 700	3 (5%)
701 - 800	0
801 - 900	0
901 - 1000	2 (3%)
1001 - 1100	2 (3%)
Not indicated	3 (5%)
N =	64 (100%)

of the program. Many students are unrealistic about their need for help. Inadequate space restricts the use of the tutoring service by more students, and some students feel there is a stigma associated with being identified as a tutee.

The elimination of the above reasons should have high priority for institutions committed to improving their service to all students. In so doing, institutions will have to increase the visibility of their tutorial programs by more effectively using available communicative media, by disseminating program information through faculty, staff, tutors, and tutees, and by implementing tutoring programs that are attractive not only to those students for whom the programs are mandatory but for other students as well.

Table 14

NUMBER OF TUTEES SERVED, NUMBER OF TUTORS BY TYPE, AND TUTEE-TUTOR RATIO

Total Number Tutees	Total Number Tutors	Peer Tutors	Para-profes-sionals	Faculty Tutees	Tutee-Tutor Ratio*
1100	165	145	20	-	7:1
1021	163	113	30	20	6:1
1000	125	100	-	25	8:1
1000	180	180	-	-	6:1
651	25	-	-	25	26:1
650	41	30	-	11	16:1
640	28	16	7	5	23:1
550	2[illegible]	20	-	-	28:1
432	169	169	-	-	3:1
425	35	25	10	-	12:1
350	NR**	-	-	-	-
350	93	63	30	-	4:1
350	31	25	-	6	11:1
350	10	6	2	2	35:1
296	29	29	-	-	10:1
250	60	60	-	-	4:1
235	98	96	-	2	2:1
235	23	15	1	8	10:1
206	120	120	-	-	2:1
197	70	70	-	-	3:1
182	139	136	2	1	1:1
181	21	18	3	-	9:1
175	13	12	-	1	13:1
173	12	4	-	8	14:1
167	13	10	-	3	13:1
150	41	40	-	1	4:1
150	33	30	-	3	5:1
150	20	20	-	-	8:1
150	19	16	-	3	8:1
147	48	48	-	-	3:1
142	42	20	20	-	3:1
139	68	68	-	-	2:1
130	18	16	1	2	7:1
120	17	5	11	1	7:1
120	28	28	1	[illegible]	4:1

Table 14 (continued)

Total Number Tutees	Total Number Tutors	Peer Tutors	Para-profes-sionals	Faculty Tutees	Tutee-Tutor Ratio*
120	40	32	3	5	3:1
117	30	16	-	14	4:1
110	30	28	2	-	4:1
102	13	3	1	9	8:1
100	5	-	-	-	20:1
92	22	22	-	-	4:1
90	30	20	-	-	3:1
82	115	75	10	30	1:1
80	35	30	5	-	2:1
78	23	20	1	2	3:1
77	50	50	1	1	2:1
66	64	64	-	-	1:1
62	36	36	-	-	2:1
60	23	20	-	3	3:1
56	29	25	-	4	2:1
50	50	50	-	-	1:1
50	3	3	-	-	17:1
45	7	-	4	3	6:1
39	8	2	-	6	5:1
36	3	3	-	-	12:1
32	23	15	1	7	1:1
31	48	34	-	14	1:1
25	26	25	1	-	1:1
12	25	25	-	-	2:1
10	8	7	-	1	1:1
9	9	9	-	-	1:1
NR	7	5	1	1	
NR	18	-	-	18	
NR	46	46	-	-	
N=14,195	N=2843	N=2418	N=166	N=245	
Total number programs = 64					

* Decimals rounded off
** NR = Not Reported

The tutorial laboratory concept begins to satisfy the above dimensions. This type of arrangement for tutorial programs is becoming increasingly more evident and will be described under the section on tutoring arrangements.

The ratio of tutors, regardless of type (i.e., peer, paraprofessional, faculty), to tutees ranges from 1:1 to 35:1, with an average ratio of 7:1. A summary of data on the total number of tutees served, the number of tutors by type, and the tutee-tutor ratio for each program surveyed is shown in Table 14.

TUTORING ARRANGEMENTS

A combination of group and individual tutoring sessions is used in most programs (67.1 percent). The exclusive use of individual tutoring sessions was reported by 26.5 percent of the programs. Only two used group sessions (see Table 15).

Table 15

ARRANGEMENTS FOR TUTORING

Tutoring Arrangement Used	Number Programs Reporting
Individual sessions (1:1)	17 (26.5%)
Group sessions (3-5:1)	2 (3.1%)
Both	43 (67.1%)
No response	2 (3.1%)
N =	64

Whether tutoring is conducted in small groups of three to five students or on an individual basis makes little difference to most tutors or tutees. Some tutors, however, indicated a preference for individual tutoring.

The several programs that use audio-visual aids (e.g., reading pacers, tape recordings, programmed instruction, and electronic calculators) all reported them to be of great value in encouraging independence in the learner. Some programs for group tutoring use an English or mathematics skills laboratory and, in one instance, a business services skills laboratory. These laboratories are new, attractive, well-equipped and well-staffed. They are open continuously during the school day, often at night, and on weekends. They have high visibility, and students may drop in as desired. Skill laboratories represent one arrangement for group tutoring in which students feel comfortable and in which they are not viewed in a negative manner by other students.

Generally, as indicated in Table 16, tutoring takes place in a special tutoring or study center or in various places around the campus: dormitories, libraries, empty classrooms, office lobbies, counseling centers, student centers, and EOP offices. Other places used for

Table 16

WHERE TUTORING CONDUCTED

Location	Number Programs Reporting*
Tutorial or study center	27 (42.1%)
Various places around campus	12 (18.7%)
Empty classrooms	9 (14.0%)
Secluded area in library	7 (10.9%)
Dormitories and private residences	7 (10.9%)
Neighborhood satellite centers	3 (4.6%)
Campus student center	3 (4.6%)
EOP office	2 (3.1%)

*Number of programs reporting do not add to 64 due to the fact that some programs use a combination of the above locations for tutoring sessions.

tutoring were neighborhood satellite centers and students' homes. (One program reimbursed tutors 10 cents per mile for travel to the tutees' homes.)

Since campus facilities are, of course, also used for other activities, several peer-tutoring programs have had to compete with other activities in the same physical surroundings. And in many instances the facilities used for peer tutoring are old, depressing, and overcrowded. Only a few campus facilities for peer-tutoring programs are new, attractive, well-kept, and large enough.

Because most programs surveyed served Black, Chicano, native American, and other ethnic minority groups, an attempt was made to determine the importance of ethnic congruency between tutors and tutees. Most program directors, tutors, and tutees interviewed expressed the conviction that the tutor's knowledge of the subject matter and the ability to relate to the tutee are of primary importance. However, some tutors and tutees did feel that in certain situations, particularly in the case of Spanish-speaking students, language differences were a barrier to a successful teaching-learning relationship.

Some program directors felt that relationships between ethnic minority group members and Whites were improved because of the tutoring program. Others felt that if a student wanted to be tutored, then any tutor available should be used, at least initially. All program directors expressed a willingness to change tutors when tutor-tutee personalities prove to be incompatible.

Generally, most tutorial programs with large percentages of ethnic minority students have tutors from the same ethnic groups. It is probable that any apparent indifference to ethnic group congruence springs from the fact that significant numbers of tutors are already from ethnic minority groups in the programs surveyed.

PROFILE OF PROGRAM DIRECTORS

The typical age range of the 18 program directors for whom personal interview data were available was 41-50 years and included eight female directors (five White, one Black, one Asian, one Chicano) and ten male directors (six Black, two White, one Asian, one Chicano).

Although most female directors had been employed at their institutions for an average of 5.75 years and had been directors of tutorial programs for an average of 2.3 years, only two had regular faculty appointments (associate professor). In contrast, male directors had been employed at their institutions for an average of 3.7 years and, not unlike the female directors, had been program directors for an average of 2.1 years, yet six of them held regular faculty appointments (five assistant professors, one associate professor). Only two program directors (one male, one female) were employed on a part-time basis; all others held full-time positions.

Three program directors held earned doctorates (one female, two males), four women and six men held the MA degree, and three women and one male possessed the BA degree. One male director did not have a college degree.

The major academic field of specialization most common to program directors was English (39 percent). Other major fields included sociology, psychology, business, music, physical education, physics, and mathematics. (The foregoing characteristics are summarized in Table 17.)

Characteristics of directors of those tutorial programs considered outstanding were: length of formal association with the institution (approximately six years), tenure as program director (at least two years), full-time appointment as program director, great commitment to the program, and appointment as a regular faculty member. Whether these characteristics alone account for outstanding program success is speculative. However, the time

Table 17

PROFILE OF PROGRAM DIRECTORS

Title of Program Director	Ethnic Group	Sex	Age range	Academic Title	Appoint-ment Status	Degree earned in major field	Total yrs on campus	Total yrs as prog. director
Chairman,Special Lab.	White	F	41-50	Instructor	Full-time	EdD/Business	7	2
Director,Spec.Serv.	White	F	41-50	Assoc.Prof.	Full-time	MA/English	7	7
Director,Tutoring	Chicano	F	31-40	None	Full-time	MA/Psych.	1	1
Director,Spec.Serv.	Black	M	31-40	Asst.Prof.	Full-time	MS/Physics	6	1
Tutor Coordinator	Asian	M	-30	None	Part-time	- /Sociology	4	1
Program Director	Black	M	31-40	Coord.	Full-time	MA/English	2	2
Tutorial Coordinator	Black	F	31-40	Counselor	Full-time	BA/Phys.Ed.	4	1/2
Coord., Tutoring	Asian	F	41-50	Instructor	Part-time	BA/Music	16	2
Dir.,Learning Center	White	F	41-50	Assoc.Prof.	Full-time	MA/English	6	3
Dir.,Tutoring Prog.	White	M	50+	Asst.Prof.	Full-time	MA/Business	5	4
Dir.,Laboratory	White	M	31-40	Instructor	Full-time	BA/English	4	4
Dir.,Special Prog.	Black	M	50+	Asst.Prof.	Full-time	MA/	3	2
Dir.,Tutorial Prog.	White	F	-30	Staff	Full-time	MA/English	1	1
Dir.,Special Prog.	Black	M	-30	Asst.Prof.	Full-time	PhD/Psych.	4	2
Assoc.Dir.,Freshman	Black	M	41-50	Assoc.Prof.	Full-time	PhD/Reading	2	2
Dir.,Tutorial Serv.	White	F	41-50	Lecturer	Full-time	BA/English	4	2
Coord.,Remediation	White	M	41-50	Assoc.Prof.	Full-time	MA/English	1	1
Dir.,Spec.Serv.	Black	M	41-50	Asst.Dean	Full-time	MA/Sociology	6	2

N = 18

and security dimensions of most of these characteristics suggests that program directors who enjoy status and security as regular faculty members have become familiar enough with the institutional decisionmaking process to effect favorable academic and adequate financial support for their programs. Additionally, because of their commitment and leadership ability they generally assume advantageous positions in developing outstanding programs.

PERCEPTIONS OF PROGRAM EFFECTIVENESS

In an attempt to determine how effective peer-tutoring programs were, we obtained the opinions of program directors, college administrators, faculty members, tutors, and tutees. Specifically, we sought to determine the perceptions of these groups in regard to the success of the programs as demonstrated by their satisfaction and the satisfaction of others with the program at their institution, the degree to which administrators and faculty members support the program, the effectiveness of peer tutors compared to para-professional or professional tutors, and the benefits that accrue to peer tutors.

Perceptions of Program Satisfaction

Most tutors and tutees reported that students, faculty, program directors, and administrators held positive views about their programs. However, at one institution tutors felt that there was poor coordination of information between some faculty members and tutors about tutee strengths, weaknesses, and progress in classes. At another institution tutors reported that a conflict with faculty members had developed over whether tutors should teach tutees general study skills or specific course contents. The faculty members at this institution felt it important to help tutees acquire study skills; tutors argued for survival skills or sufficient course content to pass required examinations. Although both skills are desirable, no resolution of that conflict was reported.

Although many college administrators were not closely involved in the internal working of the tutorial programs, almost without exception they perceived that others were very satisfied with the programs. According to one administrator everyone was satisfied because he "hadn't heard any complaints." However, at another institution a top administrator indicated that other administrators and faculty were not very enthusiastic about their tutorial program because they felt that friction between student ethnic groups about personnel and the basic philosophy of the program had destined it to failure. At that institution, Black and Chicano students felt that the program director and other key program personnel should be representative of their respective ethnic group and that the program should manifest an orientation toward their cultures. Obviously, these concerns are legitimate and the administration of institutions serving ethnic minority students should provide the resources necessary to develop programs strong enough to satisfy them. Apparently, the administration of that particular institution intentionally permitted the conflict between minority students to undermine the program. Unfortunately, the students involved did not appear to understand that the administration, and perhaps others, were not committed to the purpose of the program.

Most program directors and faculty interviewed also reported that others at their institution were satisfied with the tutorial program. Certain program directors, however, indicated that some faculty members were not aware of the program and faculty members themselves reported that many other faculty members, particularly those who had had little contact with first-year, educationally deficient students, were not aware of the tutorial program. One program director reported that a few faculty members were opposed to the program because peer and paraprofessional tutors were thought to impinge upon the teaching domain traditionally reserved for faculty, and another director reported that some faculty members were uncomfortable with programs designed to serve educationally deficient students who were predominantly members of ethnic minority groups. Clearly, some

faculty members will have to be convinced of the value of peer-tutoring programs for not only the educationally deficient but for any student in need of academic help.

Support from Administrators and Faculty

In the main, college administrators, as seen in Table 18, were reported by program directors to be more enthusiastic in their support of tutorial programs than faculty, although one program director reported the administration to be unsupportive. Evidently, the reported lack of faculty awareness about the program and the threat that some faculty members feel contributes to these reported differences in program support.

The viability of tutorial programs is closely related to institutional commitment. Administrators, program directors, and faculty were unanimous in their feeling that both administrators and faculty were concerned with institution building, but most respondents indicated that administrators were more concerned with the success of the institutions' academic, social, and athletic programs than were faculty members. Some students, however, reported that neither administrators, faculty, nor other students demonstrated a real institutional commitment. Several respondents reported that because students at commuter colleges were only on campus for brief periods of time, little opportunity was provided for them to demonstrate their commitment to the institution.

Peer Tutors Compared to Paraprofessionals or Professionals

In the course of interviews conducted at the several institutions that used more than one type of tutor program directors and tutees reported that peer tutors (advanced students) were more effective than either paraprofessionals (community aides or qualified nonfaculty personnel) or professional tutors (faculty members). Specifically, program directors said that peer tutors

Table 18

FACULTY AND ADMINISTRATIVE SUPPORT FOR TUTORING PROGRAM
(As Reported by Program Directors)

	Very Enthusiastic	Moderately Enthusiastic	Tolerant	Un-supportive	No Response
Faculty	19(29.6%)	29(45.3%)	15(23.4%)	-	1(1.5%)
Administration	30(46.8%)	28(43.7%)	4(6.2%)	1(1.5%)	1(1.5%)
Total Number Programs = 64(100%)					

were able to identify with the tutee better, knew the teaching style of the instructor in whose class tutees were enrolled and thus were in an excellent position to assist the tutee, and were more economical to employ. Tutees said they felt less threatened by peer tutors, that they could discuss their academic problems more openly with them, that the material was presented at a slower pace and often in a more interesting fashion by peer tutors than by others, and that peer tutors were competent, patient, and effective.

Benefits to Peer Tutors

The benefits to the peer tutor seem to be equal to or greater than the benefits to the tutee, according to the observations and feelings of the majority of interviewed program directors, faculty members, and tutors. Peer tutors are thought to improve in self-esteem, self-confidence, communication skills, and understanding of the subject matter being tutored. Concomitantly, tutees are believed to show improvement in the same areas, but frequently to a lesser degree. These are subjective observations but they appear to be quite accurate.

Overview of Program Effectiveness

Overall, most tutorial programs surveyed appear to provide a needed service. Such qualitative statements by program directors as: "The students asked to have the skills laboratory open at night and on Saturday," "Department heads call to see if tutors can be supplied for students having difficulty," "Many tutees invite peer tutors to their homes for dinner," attest to the success of the tutoring programs. Yet at least two programs are being undermined by the lack of faculty support demonstrated in these statements: "They ought to send them [educationally deficient students] to clean up the trash around the pool after a swimming meet," and, "Some faculty claim that tutors are teaching English who do not understand English themselves."

Program directors felt that given better facilities, more staff, and greater operating budgets, their programs could be improved. Both program directors and tutors report that far more students could profit from the program than were being reached. Yet in spite of these stated desires no concerted efforts by program directors and others to acquire additional tutorial program budgets, staff, or facilities were reported. Although most program directors and faculty, and several tutors and tutees understood the decisionmaking process at their institutions, this knowledge was not used to secure the resources necessary to provide programs that will serve all students who need tutoring.

The future of tutorial arrangements rests with those committed program directors and concerned faculty members and administrators who are able to parlay their belief in peer tutoring into viable political and educational positions that will ensure the continuation and expansion of their programs. Belief in peer tutoring, however, must be supported with empirical evidence of effectiveness. The perceptions of program effectiveness reported here are generally favorable and encouraging. But continued support for these programs will rest on evaluations that are much more rigorous.

Few tutorial programs have conducted systematic evaluations of their effectiveness. This may be attributable, in part, to the difficulty of measuring the impact of a single program when there are several intervening variables and, in part, to a lack of money or personnel necessary to conduct a rigorous and meaningful evaluation. As formidable as these reasons are, program directors must begin to find the resources necessary to evaluate their programs systematically.

The results of our survey indicate that peer-tutoring programs are apparently effective in meeting the needs of educationally deficient students. Additionally, they provide a means of shaping the teaching skills of tutors, enhancing their self-concept, and increasing their understanding of a subject matter.

The apparent effectiveness of the programs included in this survey is consonant with the findings of other studies focused on the effectiveness of tutoring programs. For example, McWhorter and Levy[1] in examining the influence of tutorial programs on tutors, found that the reading ability of tutors improves as much or more than that of the children who were tutored. Hassinger and Via[2] observed gains in reading for tutors and tutees in a study of tutorial programs and, in addition, they report that "perhaps more important than the measured reading growth was the positive attitude observed in the tutees, not only toward reading but in relation to their own self-esteem as well." In investigating the academic achievement of selected tutored and nontutored groups of college freshmen in biology, English, math, and political science, Agan[3] found significant differences between the two groups: Tutored students performed at a higher level, as determined by grades in most of the subject areas. Other evidence of the effectiveness of peer-tutoring programs at various grade levels is summarized by Gartner, Kohler, and Riessman[4] and by Cloward.[5] Thus, peer-tutoring programs are important and desirable in providing a needed service for educationally deficient tutees and for tutors, who may have also had similar educationally deficient backgrounds.

III. Essential Ingredients for Effective Peer-Tutoring Programs

The implementation of peer-tutoring programs requires careful planning and adequate resources to increase their probability of success. It is also apparent that other program ingredients are directly related to program effectiveness. With little doubt, few programs, if any, will be effective, or will survive, without a sufficiently high level of institutional commitment or a program director who is skilled in program management and development, knowledgeable in basic educational teaching techniques, politically astute, and respected by the college community.

Effective programs also require clearly stated goals, adequate funding, and attractive physical facilities large enough to accommodate all students who desire to participate. Other requirements essential for effective programs are: knowledgeable and empathetic tutors who are adequately compensated, well-developed tutor training programs, unambiguous program entry and exit criteria for tutees, ample consideration for tutor-tutee compatibility, and workable tutee-tutor ratios.

Program ingredients such as the above were manifested in those programs that were thought to be effective. In the following discussion these ingredients are explored.

INSTITUTIONAL COMMITMENT

No program will be effective if administrators and governing boards refuse to support its existence by making financial and human resources available and by providing moral support. Through its administrators, an institution must ensure that adequate and satisfactory building facilities are available for tutoring, that a program director is selected who is knowledgeable, respected by students, faculty, and staff, who is a real leader and who is accountable to the administration but is given the freedom and power to develop the program, that sufficient funds are budgeted so that all students who could benefit from the program will have that opportunity, that systematic evaluations of the program are conducted and improvements made where indicated, and that the desirability of the program and administrative support of it is stated clearly and forcefully to the entire campus community.

In the absence of these kinds of support, or commitment, tutoring programs will have little opportunity to succeed. Thus, institutions must be willing to support peer-tutoring programs in the ways indicated if they are effectively to serve students who are academically deficient.

PROGRAM DIRECTOR

Given sufficient institutional commitment, the success of peer-tutoring programs depends largely on the leadership provided by the program director. These directors must be knowledgeable about peer-tutoring programs, must be perceptive and sensitive to tutor and tutee needs, and must be politically astute. In many respects the program's continued existence will depend upon the ability of the director to "sell" it to the college community. Directors who have career-ladder positions at the college and who are aware of its gatekeepers are of course in advantageous positions to move the program toward complete acceptance as a desirable and essential program.

The director must have a great commitment toward ensuring the success of the tutoring program. He or she should also be a skilled manager familiar with office procedures, record keeping, budget procedures, interpersonal relations, and evaluation. Finally, the director should respect all students and command respect himself from the campus community.

GOALS

As indicated by our survey there is rather close agreement about the goals held for peer-tutoring programs. What is not clear, however, is the extent to which these goals are known throughout the academic staff, by administrators and by tutors. Acceptance of tutorial programs is related to the knowledge and acceptance of the program's goals by the campus community. Thus, the dissemination of the goals held for the program should reach faculty, staff, students, administrators, and the concerned public.

Specific goals held for tutoring programs should certainly include but not necessarily be limited to the following: increased understanding and knowledge about subject matter, enhancement of self-confidence and self-image, development of study skills, development of positive attitudes toward learning, and improvement of academic achievement for students performing below acceptable levels and for those who perform at acceptable levels but who are thought to have the ability to demonstrate greater proficiency.

FUNDING

Programs should be funded at a level that will permit the hiring of tutors and staff sufficient to serve all students who need tutoring. The level of funding should also guarantee the ability to purchase necessary materials and supplies, to obtain an attractive and spacious building, to provide adequate publicity and dissemination of information about the program, and to conduct systematic program evaluations.

If programs are to become an integral part of the total college program they should be funded primarily from the regular budget of the institution rather than from external funding sources. Although no precise, per student funding formula was discernible from the analysis of our data, it does not appear to be unreasonable to determine a program budget on the basis of an annual minimum of $250 per student. Thus, a program designed to serve 100 students a year would have a minimum yearly operating budget of $25,000. This budget determination assumes that physical facilities will be provided from other campus resources to house the program. An example of a suggested annual budget for a peer-tutoring program designed to serve 200 students at $250 per student follows:

Direct Costs:	
a. Program director (12 months)	$15,000
b. Peer tutors: 16 @ $3.00 per hr., 8 hrs. per week for 36 weeks (assumes each tutor will meet 16 tutees per week in groups of two for one hour)	13,824
c. Clerical staff (secretary/ receptionist)	8,000
d. Equipment and supplies	4,000
e. Program evaluation	3,000
f. Publicity	1,600
Indirect Costs (8% direct costs)	3,634
Miscellaneous	942
Total	$50,000

SELECTION OF TUTORS

The major criteria used to select peer tutors should include: desire to tutor, ability to relate to the tutee, demonstrated competence in the subject matter to be tutored, an awareness and understanding of the problems of the tutee, and at least 24 semester units of college study.

Following campuswide announcements via notices, posters, newspapers, letters to faculty and staff, and follow-up telephone calls concerning the availability of peer-tutoring positions, a pool of potential peer tutors should be compiled from the recommendations of faculty members, counselors, tutors, and students who apply for tutoring positions. On the basis of the criteria listed above, potential tutors should be screened and interviewed by the program director and experienced peer tutors. Tutors selected should then be given a trial or probationary period during which time they should be carefully evaluated to determine their effectiveness and ability to understand and relate to the tutee. Only those tutors who are judged to be effective should be retained in the program. It is expected that all tutors will undergo a period of training prior to tutoring and will receive assistance and guidance during and after their probationary period.

TRAINING OF TUTORS

Pre-service training programs are important in providing the tutor with: some understanding of teaching and diagnostic techniques, knowledge of the use of equipment available to assist tutees, insight into typical problems of tutees, an understanding and familiarity with the program's goals and organizational structure, an understanding of the duties of the tutor, and techniques for establishing rapport and a sincere relationship with the tutee without fostering tutee dependency.

In-service programs provide an opportunity to explore and become acquainted with successful teaching techniques used by other peer tutors, to discuss problems encountered in tutoring, to become familiar with the use of new equipment acquired to assist tutees, and to reinforce tutors' teaching and diagnostic techniques.

Training programs should be under the direction of the program director, with assistance provided when necessary by counselors, experienced and successful tutors,

and reading and other subject-matter specialists. The pre-service program should have a miminum duration of two weeks with daily sessions of at least two hours if the objectives as stated above are to be met.

Pre-service training programs will be most effective when clearly stated objectives are formulated and when tutors have the opportunity to demonstrate their understanding of those objectives through discussion, role-playing, and evaluation sessions.

Following the pre-service training program, which might well be scheduled during the first month of the academic year if potential tutors have been already selected, a period of internship affords the opportunity for reasonable assurance that the novice tutor understands his or her role, is familiar with tutoring techniques, and has a clear understanding of the problems of the tutee. The period of internship should last for one quarter or semester, with novice tutors assigned to experienced and successful tutors.

Novice tutors should also be required to participate in in-service programs. It is important that these programs be well-planned and that available campus resources be used to supplement the expertise of the program director. Additional benefits that arise from using other campus resources include an enhancement of the relationship between the tutorial program and other segments of the campus and an increase in the level of awareness about the program throughout the campus community.

If available, videotaping of tutoring sessions provides a reality base for analysis and discussion of tutor techniques. If this is not possible, tutors should systematically file a self-evaluation of their tutoring sessions that can be used as a basis for in-service programs. Tutees might also respond periodically to a checklist indicating their satisfaction or dissatisfaction with their working relationship with the tutor. This checklist could also be used for purposes of in-service programs.

There is no exclusive method of training peer tutors, although some materials have been published that can be used in this process.[1] It is important, however, that potential tutors undergo systematic training if they are to be effective.[2] We have suggested broad objectives for pre- and in-service training programs that can be used to formulate more specific or detailed programs.

TUTOR COMPENSATION

Although peer tutors may have some altruistic motive for tutoring, most appear to become attracted to tutoring because of the financial compensation. This is not to say that the altruistic motive is not present; it is apparent that many peer tutors derive considerable satisfaction from helping others. Further, some students --particularly those who aspire to the teaching profession--realize that their teaching techniques are strengthened through tutoring. Many students, however, have financial needs that can be partially met through working as peer tutors.

It is not unreasonable to pay peer tutors $3.00 per hour. Since peer tutors will be limited to, say, a ten-hour week, their income per month will be approximately $120.00. This is a relatively small amount but does, nevertheless, provide some financial help for tutors who may need it. The amount suggested is also significantly lower than the hourly rate of compensation for professional staff. Thus, peer-tutoring programs represent an economical method for colleges to provide an academic supportive service to those students who need it.

Another viable form of compensation for tutoring is academic credit. Operationally, a tutor would receive perhaps two semester units for tutoring, say, four students individually per week for a quarter or semester. This arrangement might be very attractive to students preparing to become teachers. The awarding of academic

credit might also serve as an incentive for students to serve as tutors in schools in the colleges' ambient community. Although college students who tutor in public schools are not in the strict sense peer tutors, this experience is transferrable, thus creating a pool of tutors who could at some point be used in the college setting. Finally, for those who have little or no need for financial compensation, academic credit for their service as tutors provides some incentive toward excellence and a reward for that service.

ENTRY AND EXIT CRITERIA FOR TUTEES

The majority of existing peer-tutoring programs do not serve as many students as could benefit from them. Obviously, limited economic resources partially explain that situation; however, equally important is the manner in which entry is gained into the program. Entry into peer-tutoring programs should be voluntary. But because many students are afraid to seek help or may feel that there is a stigma associated with the use of tutorial services, the voluntary nature of the programs may be self-defeating. One alternative that may eliminate or reduce these negative feelings and yet maintain the desired voluntary program status is the campuswide center for tutoring. In these centers individuals or groups of students are not made to feel that tutoring is primarily for special or academically deficient students but rather that it is a normal service provided by the college. There are problems with this arrangement. First, there is sometimes difficulty in getting tutee and tutor together; schedules may not mesh very well. Second, it may be difficult for the tutee to get to the appropriate tutor if he or she is in great demand or is working with an earlier arriving tutee. And then, of course, there are times when the tutor will not be utilized. This arrangement, however, is administratively simple and does ensure the voluntary status of the program.

Although it is desirable that students voluntarily seek tutorial help, counselors and instructors

should encourage those for whom additional academic help would be of benefit. Students who are experiencing difficulty in academic areas, who have difficulty in understanding the instructor, or who feel the pace of instruction in class is too fast are prime candidates for tutorial help. Additionally, those students who do not appear to be performing at a level commensurate with their ability should be encouraged by counselors and instructors to use the tutorial service.

The termination of the use of the tutoring service should be an option available to the tutee. From a practical point of view, however, tutees should not exit from the tutoring program until they can satisfactorily demonstrate that they understand the subject matter for which tutoring was received, whether they have been tutored for one month or one year. Time in the program should not automatically be a condition for exit from it. We believe that a monitored exit is more appropriate than one that is completely voluntary or mandatory simply because of the amount of time the student has been tutored.

MATCHING TUTOR AND TUTEE

Many students who desire tutoring have special needs that can be met more effectively by tutors from similar backgrounds. For example, students whose principal language is one other than English may develop more rapidly when tutors who speak the same language are selected. Concepts in many disciplines are not as easily understood in one's acquired language as in one's native language. In addition to considering language background when matching tutor and tutee, tutors should be selected who have empathy, understanding, and tolerance for the tutee and who are able to recognize the unique strengths of the tutee more readily.

The above observations do not mean that tutors and tutees should be matched only on the basis of language or cultural background. Although these criteria are important and should enter into the equation when determining tutor-tutee fit, tutors must also be selected

because of their knowledge of the subject matter, their ability to teach, and their ability to understand and effectively relate to the tutee. The role of the program director in assigning tutors is therefore a crucial dimension of the tutoring program.

In many programs the tutor-tutee matching process could be accomplished through the use of a market approach in the selection process. If, for example, a list of tutors by subject area was available to all tutees they could inquire informally about them from others and request the tutor of their choice or perhaps their top three choices. Insofar as possible, the assignment of the tutor would then be made by the program director on the basis of the tutee request.

Whatever selection method is used to match tutor and tutee, the program director should not hesitate to change tutors if it is determined that the relationship is not productive. Such determination can be made from reports solicited from the tutor and the tutee, and supplemented by personal observation.

TUTOR-TUTEE RATIO

Ideally, tutoring should be individualized and conducted on a one-to-one basis. Yet it is possible, given very similar problems of tutees, to have an effective program using small groups of two to four tutees to one tutor. In instances where problems are similar and tutees appear to be comfortable in a small group situation they may be grouped for tutoring. Tutors selected for these groups must also be comfortable in that situation.

Whether tutoring will be conducted on a one-to-one basis or in small groups will be determined by the economic resources of the program and the severity of the academic problems displayed by tutees. Both individual and small group arrangements for tutoring have been effective. The determination of the use of either

or both arrangements should be tempered by the reality of the resources of the program.

PHYSICAL FACILITIES FOR TUTORING PROGRAM

One indication of the importance placed on the tutorial program by the institution is the adequacy of the facilities designated for use by the program. Those institutions that place a high value on tutoring programs provide ample and inviting facilities to house them; those institutions that do not view these programs as being important relegate them to facilities that are undesirable. Ideally, the physical facilities used for the tutoring program should be large enough to accommodate all students who need tutoring, attractive enough to encourage student use, and spacious enough to house special equipment, individual and small group tutoring rooms, general purpose rooms, and administrative offices. Further, this facility should be located in a central place on the campus convenient for use by all students. The importance of this condition as an ingredient for program success is shown by the fact that facilities with limited visibility also receive limited use.

SUMMARY

Effective peer-tutoring programs do not simply emerge from thin air. They must be planned carefully and receive the support and long-range commitment of administrators, faculty, and staff if they are to be implemented successfully within institutions. The probability of their effectiveness, given that support and commitment, will be closely associated with the effectiveness of program directors in guiding and nurturing them into meaningful and viable adjuncts to the regular academic program.

Other dimensions or ingredients that appear to be essential for effective programs include clearly stated goals, sufficient funds, careful selection and training of tutors, clear entry-and-exit criteria for

tutees, tutor-tutee compatibility, manageable tutor-tutee ratios, and the provision of adequate and centrally located physical facilities.

IV. Evaluation of Peer-Tutoring Programs

The continuation of peer-tutoring programs will depend on how effective they are in meeting the goals held for them. To make this determination, peer-tutoring programs must be systematically evaluated. Evaluation is also necessary to identify program strengths and weaknesses, thereby providing information that will enable program directors to make rational decisions in choosing among various program components and in improving the overall effectiveness of peer tutoring. Thus, evaluation is an essential dimension of peer-tutoring programs.

The inclusion of an evaluation component in most peer-tutoring programs generally has not been the rule, and in rare instances where some type of evaluation has been attempted these efforts have suffered from weak research methodologies. The lack of rigorous program evaluation efforts stems from insufficient funds to support evaluation studies, lack of personnel to conduct evaluations, failure to recognize the importance of evaluations, and resistance to an evaluation process that may produce negative results.

Problems of the above sort are not unsolvable. In fact, two of the reasons presented can be eliminated simply by including an adequately budgeted evaluation component in the peer-tutoring program proposal submitted for funding. The other reasons are gradually being

eliminated by the demand from institutions and other funding agencies for empirical evidence that special programs such as peer tutoring are effective. The failure to recognize the importance of evaluation and the resistance to conducting an evaluation are negative attitudes that only serve to adversely affect these programs. These attitudes are also being changed through the demand for program evaluation by institutions and funding agencies.

PROGRAM GOALS AND OBJECTIVES

The effectiveness of peer tutoring may be determined by using one or several indices, such as improvement in academic achievement, retention rates, attitudes toward education, self-esteem, and motivation. The selection, however, of appropriate criteria for determining program effectiveness will depend on the clarity and feasibility of the overall goals and objectives held for the program. For example, to indicate that a program is designed to "improve the academic achievement of students receiving peer tutoring" is a broad statement that needs greater specificity. Thus, more specific objectives should be developed that can be measured and that spell out the manner in which broad goals are to be met. In this instance, such objectives might focus on such questions as: What is academic achievement? Is it gain scores on standardized tests? Is it overall grade-point average? Is it simply passing a designated course at a minimum grade average? What student population is to receive training in the program? For how long? At what college grade level? These are examples of the kinds of initial questions that should shape objectives to be assessed in determining program effectiveness.

It is also necessary to indicate whether program goals are short-range, middle-range, or long-range. Not only will the thrust of the program differ depending on the goal-time range, but the objectives by which the goal is to be met and measured will also differ. If

the overall goal of the program is to prepare students to successfully complete the PhD degree in physics rather than, say, a program designed to increase the level of performance in a certain area by X points within eight weeks, then assessing the objectives of the program will demand a longitudinal evaluation using multievaluational techniques. To meet the ultimate goal of preparing students to successfully complete PhD degrees in physics, however, may demand short-range objectives of improving basic study habits and intermediate objectives focused on acquiring mastery of selected areas in mathematics. Thus, the specification of the time range of objectives provides greater program direction and accuracy in evaluating its effectiveness.

In the evaluation process a determination must also be made of whether to concentrate exclusively on attainment of the program's goals or on the process by which the ends are met, the efficiency with which resources are used, and the commitment and effort expended by the staff in reaching stated goals.

If the evaluation effort is directed to the process by which goals are met then we are concerned with attempting to explain the success or failure in meeting those goals. For example, questions such as these might be asked about the program's process: Can program success be attributed to the tutoring arrangement? Is program success closely associated with the use of peer tutors trained to use specific teaching approaches? Do regular, structured faculty-tutor conferences about the tutee contribute to the effectiveness of the program?

If the evaluation effort is concerned with the efficiency with which goals are met then questions relative to the allocation of resources--financial, human, physical--must be answered. The central questions are: Could the same results be achieved at less cost? Or, could better results have been achieved through greater allocation of resources?

On yet another level, program evaluation might focus on the effort expended in meeting the goals held

for the program. Does the staff put forth sufficient effort in attempting to meet the goals held for the program? Is the commitment of the program staff and the institution sufficient to move the program forward toward meeting stated goals?

The evaluation of peer-tutoring programs can be rather complex. Many programs will have multiple goals and a wide array of objectives by which the attainment of those goals can be measured. The foregoing discussion was concerned with different dimensions of evaluation that should be considered in formulating the evaluative effort. It is likely, however, that most programs will not have the staff or financial resources necessary to simultaneously conduct critical and thorough examinations of the different dimensions of the program discussed here. Programs should, however, allocate the resources necessary to evaluate different aspects and objectives of peer tutoring over time. For example, the evaluation effort during one year might seek to measure the effectiveness of the program in improving academic performance. During another year the evaluation effort might be concerned with the retention rate of students receiving peer tutoring. The decision to evaluate a specific program objective will, of course, rest with the program director in consultation with the evaluator and with essential decisionmaking bodies.

PREPARING FOR EVALUATION

The evaluation effort will be aided considerably by the systematic collection of pertinent information about the program. Many routine questions about the effectiveness of the program can be determined from information about tutees, tutors, and the operation of the program.

For tutees such questions might cover: the number receiving tutoring by quarter or semester, the number recommended for the program by subject area, the number who volunteer by subject area, the number who exit successfully from the program, the length of time

tutoring is received, the number who drop out of the program, the number who receive tutoring by academic subject, the level of academic performance at the time of entry into the program, as determined either by subject grades and performance on initial college examinations or by staff-developed techniques that have reliability and validity, sex, languages spoken, and, from college records, age, high school attended, overall high school grade-point average, and grades received in specific subjects, e.g., English and general mathematics.

Basic information for tutors might include: age, sex, number of tutors used each semester or quarter by college classification and major area of study, number of applicants who seek tutor positions and the number who are recommended by faculty or others each quarter or semester, academic performance level overall and in the subject area in which tutoring will be done, languages spoken, and high school attended.

Routine information to be collected about program administration might include: budget and request appropriation, amount spent each academic quarter or semester for program operation, instructional costs per tutee, the number of students who would probably benefit from the tutoring program as indicated by initial college entry or placement tests and the number who enter the program, and basic information on the focus of tutor training programs, how they are structured and how personnel are used.

The routine collection of information about the program is not only desirable for program evaluation purposes but also for planning purposes. The determination of budgets, staff requirements, space requirements, and the like will be aided greatly by the systematic collection of the kinds of basic information suggested here, particularly in the domain of program administration.

EVALUATION RESEARCH DESIGN

In evaluating peer-tutoring programs the research design used should permit the formulation of justifiable or valid conclusions about their effectiveness. While we recognize that unintended results of peer-tutoring programs might also be examined through a variety of research strategies, our focus here is on the degree to which peer-tutoring programs are effective in meeting their intended or stated objectives and goals.

One of the most widely used research designs involves: 1) the selection of similar subjects as determined by matching them through the use of a variety of indices, e.g., age, sex, academic achievement, family background, verbal ability, 2) the random assignment of those subjects to an experimental or control group, 3) the determination of some baseline data in the area for which a treatment has been designed, 4) exposing the treatment to the experimental group while withholding it from the control group, and 5) measuring the differences in performance between the experimental and control groups after a prescribed length of time.

While this research design has great merit, its use suggests that students who might benefit from peer-tutoring programs, if peer tutoring is used as a treatment, would not receive the treatment if they were assigned to the control group. Thus this creates the possibility that services which are potentially beneficial for selected students may be withheld. While this is not a desirable situation, many programs do not currently serve all students who could benefit from them because of limited resources. To obtain additional resources, programs must be able to demonstrate empirically that they are of great benefit. Although the research strategy of measuring the effectiveness of peer tutoring by randomly assigning matched students to experimental and control groups may require that the same peer-tutoring arrangement be withheld from some students, it may also provide the conclusive evidence needed to convince college administrators that programs should be expanded and made an integral part of the institution.

For pilot programs or programs with limited budgets the selection of control and experimental groups will be influenced by the number of students the program can accommodate. This assumes that there will be many more students qualifying for entry into the program than can be admitted. For other programs that currently serve all students who need tutoring their assignment to control or experimental groups might be done to measure the relative effectiveness of different tutoring arrangements, e.g., one-to-one versus small group tutoring. This type of arrangement permits all students to receive tutoring while at the same time provides information that can be used to ensure that the most effective delivery system will be used in serving them.

There are, of course, other research designs that can be used to examine program effectiveness. It may be desirable to examine research designs that are appropriate for longitudinal evaluation strategies and those that rely on more flexible approaches. Our intent here is simply to indicate one design that can be used in measuring peer-tutoring effectiveness. The selection of a specific research design will be determined by the research questions for which answers are sought.[1]

RESEARCH QUESTIONS

Although the overall program goal for peer-tutoring programs may be the improvement of academic performance of students in the program, there are a variety of questions about tutor selection, tutor effectiveness, tutoring arrangements, tutee growth in the affective domain, tutee selection, and program impact for which answers should be sought in examining program effectiveness.

The basic research question to be answered about peer tutoring is: Do students who receive peer tutoring improve in academic performance, in the area for which tutoring has been received, at a level that is significantly different from students who do not? Examples of other research questions are suggested below.

1) Is individual tutoring more effective than group tutoring?

2) Are peer tutors more effective than paraprofessional or professional tutors?

3) Are peer tutors with family backgrounds similar to those of tutees more effective than others?

4) Do peer tutors who earn the grade of A in the area in which they wish to tutor more effective than those who earn less than an A?

5) Do tutees show more significant academic growth when tutoring sessions are focused on general study skills, course content, test-taking skills, or a combination of these?

6) Are trained peer tutors more effective than untrained ones?

7) Is ethnic group congruency important in matching tutors and tutees?

8) Is sex congruency important in matching tutors and tutees?

9) Does the college level, i.e., freshman, sophomore, junior, senior of the tutor have a significant effect in tutoring?

10) What is the impact of peer tutoring on tutors in the affective and cognitive domains?

11) Do tutees display significant growth in the affective domain?

12) Has the peer-tutoring program had an effect on faculty attitudes and expectations about students who initially perform at low academic levels?

13) Has the peer-tutoring program had an effect on the teaching styles of faculty members from whom many tutees come?

14) Which tutees seem to benefit most from peer tutoring?

INTERNAL OR EXTERNAL EVALUATION

The question of whether insiders or outsiders should conduct the evaluation of the program has been a continuing source of concern. There are advantages and disadvantages for both.

Individuals closely associated with the program are more knowledgeable about it, usually understand its goals and objectives, and are aware of the difficulties encountered in attempting to meet program goals and objectives. They will therefore probably be more acceptable to the program staff and participants, thereby increasing the probability of open participation. Further, because of their intimate association with the program, these internal evaluators may be in a better position to assess the magnitude of its success than others. Yet it is precisely because of their close association with the program that internal evaluators are viewed by some as being too subjective for the complete and dispassionate objectivity that evaluation requires.

External evaluators are thought to be more objective because they do not have a vested interest in the program or close friendships with program staff. On the other hand, external evaluators may not have a sufficient understanding of the program to provide meaningful insight into the problems associated with peer-tutoring programs.

The pros and cons that surround the use of either internal and external evaluators are not without merit. We would argue, however, that external evaluators be used if the total program is to be examined. While internal evaluators may be knowledgeable about the program, they must face the social reality of strained relationships with their peers because of the resistance associated with the acceptance of negative findings, should such findings emerge. Internal evaluators may also be accused of attempting to sabotage the program if the findings are negative and are used to justify a reduction in financial support for the program.[2]

Therefore, the pressures that may be experienced by internal evaluators because of negative findings may indeed influence their objectivity in critically examining all aspects of the program.

At another level, when evaluations that are concerned with selected aspects of the program, e.g., retention rates of students receiving peer tutoring, are relatively neutral, such evaluations may be conducted more effectively by internal staff.

Finally, whether internal or external evaluators are used to evaluate peer-tutoring programs, they should be selected on the basis of their technical competence and their ability to understand the intent of these programs. Further, sufficient time and money must be allocated to periodically permit complete examination of any program.

SUMMARY

The evaluation of peer-tutoring programs is an essential component of effective and efficient program operation. Because the evaluation process provides the means by which program strengths and weaknesses can be identified, it is thus viewed as a diagnostic tool, the use of which will enable us to better serve students who use peer-tutoring programs.

Planning for program evaluations should be included during the initial stages of program development to ensure the sufficient allocation of funds, the collection of pertinent information, and the selection of competent evaluators.

Effective evaluation demands: 1) the cooperation of evaluators and program directors and other staff, 2) that program goals are clear and objectives measurable, and 3) that the purposes of the evaluation be known in advance.

The future of peer-tutoring programs will be enhanced by their demonstrated strengths and by our ability to identify and eliminate their weaknesses.

V. The Future of Peer-Tutoring Programs

Peer-tutoring programs in higher education were implemented with the belief that they would help ameliorate the academic deficiencies of students who entered college with poor educational backgrounds. These programs appear to have been successful for both tutees and tutors. Yet the precise reasons for their success have been rather elusive. Thelen (1969) has suggested that tutoring is successful because of the helping relationship between students. This assumption is indeed plausible.[1] Our observation of peer-tutoring programs, however, suggests that the individualized instructional arrangement and the personal pride both tutor and tutee seek to maintain are prominent ingredients in tutoring success.

The individualized tutoring arrangement permits instruction to proceed at a comfortable pace, in a nonthreatening manner, and with a tutor who is evidently able to explain the subject matter from a practical level, supplemented with references to personal experiences that may parallel those of the tutee.

There is also a tremendous amount of personal pride associated with tutoring. Tutees are anxious to prove to their peers (tutors) that they can achieve

academically at sufficiently high levels when given the necessary background in a manner that they can understand. Concomitantly, tutors strive to manifest their command of a subject matter in a fashion that will bring them admiration and respect. Thus, the personal pride factor appears to contribute significantly to the success of peer tutoring.

To be sure, there are other explicit explanatory variables for peer-tutoring success, and in time they will be examined. Nevertheless, the belief held by program directors and others associated with peer-tutoring programs is that, regardless of the reason, these programs are successful. And, the limited existing research and evaluation evidence seems to confirm that they are. What then should be the future of peer-tutoring programs in higher education? Certainly they should be continued and expanded in institutions in which they currently exist and implemented in those in which they do not. Specific characteristics that should be associated with their existence are discussed in the form of recommendations that follow.

RECOMMENDATIONS

1) Clearly stated program goals and objectives should be established.

Broadly-based goals and specific measurable objectives should be developed prior to program implementation. These indicate the purpose and direction of the program to the program staff and to the broader campus community.

Program goals and objectives should be developed through the involvement of students, faculty, administrators, and program staff. The full participation of these groups ensures that the program's goals and objectives will enjoy wide acceptance, that the program addresses itself to the needs of the students, and that it will receive support throughout the campus community.

2) Peer-tutoring programs should be institutionalized.

Peer-tutoring programs should be an important permanent addition to the total college program and should be accorded the same status as other essential student services. These programs should receive sufficient institutional funds to provide tutoring for all students needing it. Institutions must be committed to peer-tutoring programs and willing to support them by budgeting adequate financial resources and by ensuring that they have effective leadership imbued with authority and power at least commensurate to other directors of essential student services.

3) Peer-tutoring programs should be centrally located on campus and housed in an attractive facility.

The tutoring program should be conveniently accessible to all students, highly visible, and centrally located. Psychologically and strategically, the location of the tutoring program should indicate the importance placed on it by the institution. Further, the probability of maximum student use of the tutoring program will be greatly enhanced by housing it in a central location on campus.

Student use of the program is also a function of the attractiveness of the facility in which it is housed. Facilities that are spacious and attractive invite use; small, unattractive ones do not. In addition, the visual quality of the facility reflects the level of institutional commitment to the program. If tutoring programs are to serve all students needing them then institutions must establish the physical conditions required for maximum use: central campus location and visual attractiveness.

4) The time schedule of operation for peer-tutoring programs should be flexible.

Many students desiring and needing tutoring are unable to avail themselves of the program if it operates during only a few hours in the course of a day. This is particularly true for students attending school at night and those having to work during the day. It is imperative, therefore, that the program be available for student use throughout the day, on week-ends, and at night.

5) Successful techniques used in tutoring should be widely disseminated.

Peer-tutoring techniques that prove to be highly successful should be systematically compiled by the program director and disseminated to faculty members and other tutors. This can be accomplished through workshops, newsletters, individual conferences, and local, state, and national publications. The dissemination of innovative and successful teaching strategies should contribute immensely to the improvement of teaching.

6) Peer-tutoring should be systematically evaluated.

As a diagnostic tool, evaluation is an indispensable program component. The assessment of program effectiveness should be a normal requirement for program existence. Moreover, evaluation can be used to identify program strengths and weaknesses, thus facilitating program improvement if indicated.

Program evaluation should be periodically conducted by competent and understanding external evaluators. These evaluations should be rigorous and should focus on the attainment of the goals and objectives of the program and the process involved in meeting them.

7) A basic information system should be established at each institution.

Directors should regularly collect basic information about peer-tutoring programs. Such information might include selected tutee, tutor, and general program characteristics. At a minimum level the following types of information might be collected. For tutees: number in program each semester or quarter, sex, ethnicity, age, college classification, the length of time tutoring is received, dropout rates number receiving tutoring by academic subjects, proposed college major, and career or occupational goal(s). For tutors: number each semester or quarter by college classification and major area of study, hours taught per week, tutor-tutee ratio, academic performance in the specific subject area in which tutoring is to be done and overall grade average, age, sex, and ethnicity. For program administration: budget appropriation and expenditures per year, instructional cost per student, operational cost per student, and annual survey of student academic needs at the beginning of each year.

The systematic collection of the types of information discussed here should enable better program planning and should indicate, in part, the effectiveness of the program in serving academically deficient students.

POSTLUDE

Peer-tutoring programs have embellished traditional college teaching in a highly significant manner. The growth of these programs throughout academe attests to the success they have generally had. Originally implemented to meet the academic needs of the educationally deficient student these programs are becoming the sine qua non for all students.

Peer-tutoring programs represent an alternative to traditional college teaching arrangements with benefits to tutors and tutees. Additionally, their potential for assisting in the improvement of teaching through the exportation and adoption of successful tutoring techniques cannot be minimized.

It is evident that these programs will not solve, and should not be expected to solve, all the problems of the academically deficient student. Certainly effective academic, career, and personal counseling services, and adequate financial aid should be available and used by these students. However, the academic needs of educationally deficient students can be partially but effectively met through peer-tutoring programs. The implementation of these programs adds an important dimension to the array of student services currently available and should be a high-priority item at every institution of higher learning.

FOOTNOTES

Chapter I

[1]For a discussion of these programs see Chapter II of Gartner, A., Kohler, M. C., & Riessman, F, *Children teach children: Learning by teaching*. New York: Harper and Row, 1971.

Chapter II

[1]McWhorter, K. T., & Levy, J. The influence of a tutorial program upon tutors. *Journal of Reading*, January 1971, *14*, 221-224.

[2]Hassinger, J., & Via, M. M. How much does a tutor learn through teaching reading. *Journal of Secondary Education*, January 1969, *14*(1), 42-44.

[3]Agan, R. D. A study of the achievement of tutored versus nontutored college freshmen. Dissertation, University of Iowa, 1971.

[4]Gartner, A., Kohler, M. C., & Riessman, F. *Children teach children: Learning by teaching*. New York: Harper and Row, 1971.

[5]Cloward, R. D. Studies in tutoring. *The Journal of Experimental Education*, fall 1967, *36*(1), 14-25.

Chapter III

[1]Although most training programs have been developed for younger tutors than those with whom we are here concerned, the ideas are transferable. See G. V. Harrison, Training students to tutor, Technical Memorandum 3686/000/00, System Development Corporation, Santa Monica, California, September 28, 1967; G. V. Harrison, Tutor training kit: An instructional system in mathematics, System Development Corporation, Santa Monica, November 1969; and P. Lippit, R. Lippit, & J. Eiseman, *Cross-age helping program: Orientation, training, and related materials*. Ann Arbor: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, 1969.

[2]In an interesting study on trained versus untrained tutors Niedermeyer found that trained tutors are more effective than those who have no formal training. See F. C. Niedermeyer, Effects of training on the instructional behaviors of student tutors. *The Journal of Educational Research*, November 1970, *64*(3), 119-123.

Chapter IV

[1]For an excellent discussion on research design see D. R. Campbell & J. C. Stanley, Experiment and quasi-experimental designs for research and teaching. In N. L. Gage (Ed.), *Handbook of research on teaching*. Chicago: Rand McNally, 1963.

Another excellent source on evaluation research techniques is J. M. Gottman & R. C. Clasen, *Evaluation in education: A practitioner's guide*. Itasca, Ill.: Peacock Publishers, 1972.

[2]R. K. Carter. Clients' resistance to negative findings and the latent conservative function of evaluation studies. *The American Sociologist*, May 1971, *6*, 118-124.

Chapter V

[1]H. A. Thelen. Tutoring by students. *The School Review*, September-December 1969, 229-244.

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APPENDIX A

DIRECTORY OF TUTORING PROGRAMS SURVEYED

Institution	Tutorial Program	Director	Tutors (type)
1. Alabama A and M University Normal, Alabama 35762	Special Services Project	Army Daniel, Jr. Director (205)859-0800/Ext.388	Peer/Faculty
2. Alice Lloyd College Pippa Passes Kentucky 41844	Special Services for Disadvantaged Students	Robert E. Hall Director of Special Services, Box 82	Peer/Faculty
3. Berea College CPO 2310 Berea, Kentucky 40403	Special Services Program	Paul C. Hager Director, Testing and Special Services (606)986-4134	Peer
4. Borough of Manhattan Community College City University of NY 134 West 51 Street New York NY 10020	Tutorial Program	James Schiavone Coordinator for Remediation (212)780-5531/Ext.32/33	Peer/Faculty/ Paraprofessional
5. Brooklyn College 2208 Boylan Hall Brooklyn NY 11210	Academic Resource Program	Mrs. Dawn M. Cross Coordinator (212)780-5531/Ext.32/33	Faculty

Institution	Tutorial Program	Director	Tutors (type)
6. Cal State University -Fullerton 800 N.State Coll.Blvd. Fullerton, Calif. 92631	Supportive Services, Tutoring Component	Arturo Franco Dean of EOP (714)870-3750	Peer/Faculty
7. Cal State University -Hayward 25800 Hillary Street Hayward, Calif. 94542	Intercultural Education and Resources Center	Paul E. Burghardt Director (415)884-3771	Peer/Faculty
8. Cal State University -Los Angeles 5151 State Coll. Drive Los Angeles, Calif 90032	EOP Tutorial Program	Ralph Dawson EOP Director (213)224-2153	Peer/Para-professional
9. Cal State University -Sacramento 600 Jay Street Sacramento, Calif. 95819	EOP	David Clements EOP Director, TCC-5 (916)454-6183	Peer/Faculty/ Paraprofessional
10. Cal State University 1600 Holloway Avenue San Francisco 94132	Educational Opportunity Program	David West, Director Mary Ward Hall, Rm.304 (415)469-1646	Paraprofessional

Institution	Tutorial Program	Director	Tutors (type)
11. Camden County College PO Box 200 Blackwood, New Jersey 08012	Tutoring Program	Tom Carpenter Counselor (609)227-7200/Ext.750	Peer
12. Central Washington State College Ellensburg WA 98926	Educational Opportunities Program	Rodney E. Converse Director, EOP (509)963-2130	Peer/Faculty
13. City College of New York 138th at Convent New York NY 10031	Open Admissions	Alan Fiellin Assoc.Dean, CLAS (212)621-2454	Peer/Para-professional
14. Cleveland State University Cleveland, Ohio 44115	Student Development Program--Division of Special Studies	Eugene W. Mallone Program Director (216)687-2010/Ext.2011	Peer/Faculty/ Paraprofessional
15. College of San Mateo West Hillsdale Blvd. San Mateo CA 94002	Learning Center	Raymond J. Pflug Chairman Learning Center Committee Building 18, Rm. 912 (415)574-6437	Peer/Para-professional

Institution	Tutorial Program	Director	Tutors (type)
16. Community College of Allegheny County 429 Forbes Avenue Pittsburgh PA 15219	Operation Hi-Support	Lillie M. Lockhart Director (412)391-6200/Ext.69	Faculty
17. Community College of Baltimore 2901 N.Liberty Heights Baltimore MD 21215	Tutorial Assistance	Christine Moore Director, Developmental Studies Office 137 Room L (301)462-5800/Ext.214	Peer/Faculty
18. Community College of Denver, North Campus 1001 East 62 Avenue Denver CO 80216	Skill Center Instructional Program (SKIP) & Labs	Director (303)286-3311/Ext.251	Peer/Faculty/ Paraprofessional
19. Coppin State College 2500 West North Avenue Baltimore, Maryland 21216	Special Services	Mary B. Adams Director (301)383-4552	Peer
20. Cuyahoga Community College 2900 Community Coll.Ave. Cleveland, Ohio 44115	Communications Reading and Development-Learning Center	Nan Holman Learning Center Director (216)241-5966/Ext.285	Peer/Para-professional

Institution	Tutorial Program	Director	Tutors (type)
21. Eastern New Mexico University Portales NM 88130	Student Tutorial Program	Hershel Potts Dean of Men, Admin.Bldg. (505)562-2221	Peer
22. East Los Angeles City College 5357 Brooklyn Avenue Los Angeles CA 90022	Peer Tutoring	Booth Woodruff Tutoring Supervisor (213)263-7261/Ext.214	Peer
23. El Centro College Main and Lamar Dallas, Texas 75202	Peer Tutorial Counseling Program	Ruber Herd, Assoc.Dean of Instruction	Peer/Faculty
24. Federal City College 425 Second Street, NW Washington DC 20002	Special Student Services Project in Higher Education	Hosea Zollicoffer Director, Rm.1145 (202)727-2400	Peer/Faculty/ Paraprofessional
25. Florissant Valley Community College 3400 Pershall Road St. Louis, Missouri 63135	SCOPE Project (Self-concept Opportunity Program Experiment)	Anderson Woods Assistant Professor (314)524-2020/Ext.309	Peer/Faculty

Institution	Tutorial Program	Director	Tutors (type)
26. Fresno City College 1101 E. University Ave. Fresno CA 93706	Educational Opportunity Program	Robert Arroyo Director (209)264-4721/Ext.291	Peer/Faculty/ Paraprofessional
27. Golden Gate College 536 Mission Street San Francisco CA 94105	No name	Margaret Kem Instructor	Peer/Faculty
28. Herbert H. Lehman Coll. Bedford Park Blvd.West Bronx NY 10468	CASA Student Services Board Tutoring Program	Philip E. Powell Counselor 129 Shuster Hall (212)960-8552	Peer
29. Jefferson State Junior College 2601 Carson Road Birmingham AL 35215	Tutorial Program	Bonny Franke Counselor, Box 20 (205)853-1200/Ext.50	Peer
30. John Jay College 360 Park Avenue South New York NY 10010	SEEK Tutoring Program	Mrs. B. Mincy Academic Coordinator (212)533-7800/Ext.139	Peer/Faculty

Institution	Tutorial Program	Director	Tutors (type)
31. John Jay College of Criminal Justice 360 Park Avenue South New York NY 10010	Tutoring Program (non-SEEK)	Joseph Kennan Coordinator, Rm.1104 (212)725-9732	Peer/Faculty/ Paraprofessional
32. Kansas City Kansas Community Jr.College 824 State Kansas City KS 66101	Tutoring Program	Helen Gurtler Counselor-Supervisor of Tutoring (913)371-3154	Peer
33. Kingsborough Community College 2001 Oriental Blvd. Brooklyn NY 11235	Institute for Tutorial Services	Mrs. Naomi Glanzrock Director (212)769-9200/Ext.291	Peer
34. LaGuardia Community College 31-10 Thomson Avenue Long Island NY 11101	Commications Skills	Janet E. Lieberman Asst. Dean of Faculty Room 309 (212)937-9200/Ext.221	Paraprofessional and Faculty
35. Laney College 900 Fallon Street Oakland CA 94607	Extended Opportunity Program and Services	Flora Luster EOP Director, Rm.G-275 (415)834-5740/Ext.4540	Peer/Faculty/ Paraprofessional

Institution	Tutorial Program	Director	Tutors (type)
36. Lansing Community Coll. 419 North Capitol Ave. Lansing, Michigan 48914	Project 30	Gilbert M. Hill Admin. Officer (517)373-7150	Peer
37. Lenoir Community Coll. PO Box 188 Kinston NC 28501	Handicapped-Special Needs Program for Vocational Students	William George Counselor (919)527-6223/Ext.45	Peer
38. Los Angeles City Coll. 855 North Vermont Ave. Los Angeles CA 90029	Tutoring Program	Kayoko Wakita Coordinator, Instr.II (213)633-9141/Ext.314	Peer
39. Los Angeles Harbor Coll. 1111 Figueroa Place Wilmington CA 90744	Extended Opportunity Programs and Services (Tutoring)	Anthony Q. Sarinana Director of EOPS (213)835-0161/Ext.314	Peer
40. Los Angeles Valley Coll. 5800 Fulton Avenue Van Nuys CA 91401	Tutoring Center	John E. Gipson Associate Professor (213)781-1200/Ext.411	Peer/Faculty/ Paraprofessional
41. Medgar Evers College 1127 Carroll Street Brooklyn NY 11225	Tutorial Program	Susan M. Carr, Director of Tutorial Program (212)783-7604/Ext.17	Peer/Faculty/ Paraprofessional

Institution	Tutorial Program	Director	Tutors (type)
42. Mercer University Macon, Georgia 31207	Special Services	George Espy, Jr. Director, Box 44 (219)743-1511/Ext.254	Peer/Faculty/ Paraprofessional
43. Mount San Antonio Coll. 1100 North Grand Avenue Walnut CA 91789	Extended Opportunity Programs and Services Tutoring Program	Fred M. Strait Asst.Dean, Special Progs. (213)339-7331/Ext.240	Peer
44. Olympic College 16th and Chester Sts. Bremerton WA 98310	Academic Tutoring	James L. Benis, Dean of Academic Instruction Admin. Building (206)478-4545	Peer/Faculty/ Paraprofessional
45. Pierce College 6201 Winnetka Avenue Woodland Hills CA	Student Academic Motivational Service	Isadore Rosenberg Study Skills Director (213)347-0551/Ext.229	Peer
46. Queens College of CUNY 65-30 Kissena Blvd. Flushing NY 11367	Tutoring Program	Dr. George O. Phillips Assoc.Dir. of Studies (212)445-7500/Ext.492	Peer/Faculty

Institution	Tutorial Program	Director	Tutors (type)
47. Reedley College 995 North Reed and Manning Reedley CA 93657	Tutorial Assistance	Armando J. Gonzales EOPS Director (209)638-3641	Peer
48. Sacramento City College 3835 Freeport Blvd. Sacramento CA 95822	College Awareness	William A. Smith Director of Special Programs (916)454-5183	Peer
49 San Antonio College 1300 San Pedro San Antonio, Texas 78284	Tutoring Program	Mrs. Cathryn Moore Coord., Guided Studies Main Bldg., Office 10 (512)784-5381/Ext.351	Peer
50. San Diego City College 1425 Russ Boulevard San Diego CA 92101	No name	D. R. Burtraw Dean of Students (714)234-8451/Ext.301	Peer
51. Seattle Central Community College 1718 Broadway Seattle WA 98122	Student Support Center	Peter T. Koshi, Director Minority Affairs Jerry Schneider, Acting Director, Counseling (206)587-5433	Peer/Faculty

Institution	Tutorial Program	Director	Tutors (type)
52. Sinclair Community Coll. Dayton, Ohio 45402	Tutorial Program	Frank Douthwaite Director of TUtorial Services (513)223-7151/Ext.52	Peer
53. State University of NY at Buffalo 3435 Main Street Buffalo NY 14214	Tutorial Laboratory	Mrs. Elizabeth Boepple Coordinator Rm. 3, Old Faculty Club (716)831-5363	Peer/Faculty/ Paraprofessional
	Experimental Program in Independent Study (EPIS)	Emmett Lyons, Sr. Interim Director (716)831-5363	
54. Tarrant County Junior College 5301 Campus Drive Fort Worth, Texas 70119	Special Services Tutorial Program	Abe Washington, Director of Special Services Room 204 LRC (817)534-4861/Ext.416	Peer/Para-professionai
55. University of California at Santa Barbara Santa Barbara CA 93106	EOP Tutorial Program		Peer

Institution	Tutorial Program	Director	Tutors (type)
56. University of Houston 3801 Cullen Blvd. Houston, Texas 77004	Student Opportunity Service	Victoria Budd, Director 310-L Student Life Bldg. (713)748-6640/Ext.1745	Peer/Para-professional
57. University of Michigan 1220 Student Activities Building Ann Arbor MI 48104	Coalition for the Use of Learning Skills	Frank Yates Asst.Prof. Psychology 1021 Angell Hall	Peer
58. University of Nevada 4505 Maryland Parkway Las Vegas NV 89101	Special Services for the Disadvantaged	Edmond Lewis, Director Student Personnel (702)739-3481	Peer/Faculty
59. University of Northern Colorado Greeley CO 80631	Special Services	Steven Valenzuela No.10 Gray Hall (303)351-2293	Peer
60. University of the Pacific 3601 Pacific Avenue Stockton CA 95204	Community Involvement Program	Yvonne Allen, Director (209)926-2438	Peer
61. University of Washington Seattle WA 98105	EOP Tutorial Program	Pat Clark, Coordinator (206)543-7047	Peer

Institution	Tutorial Program	Director	Tutors (type)
62. Washington State University Pullman WA 99163	Experimental Education Program	Louis McNew, Coordinator French Admin. Bldg. (509)335-4323	Peer/Faculty
63. Wichita State University 1845 North Fairmount Wichita, Kansas 67208	Project Together-- Special Services	R.W. Blake, Admin.Asst. to Dean of Students Morrison Bldg., Rm.001	Peer/Para-professional
64. Xavier University of Louisiana 7325 Palmetto Street New Orleans LA 70125	Special Counseling and Tutorial (SCAT)	Virginia Cox Welch Associate Professor Box 79A (504)486-7411/Ext.273	Peer/Faculty

APPENDIX B

COVER LETTER FOR QUESTIONNAIRE
QUESTIONNAIRE
INTERVIEW SCHEDULE

UNIVERSITY OF CALIFORNIA, BERKELEY

BERKELEY • DAVIS • IRVINE • LOS ANGELES • RIVERSIDE • SAN DIEGO • SAN FRANCISCO — SANTA BARBARA • SANTA CRUZ

CENTER FOR RESEARCH AND DEVELOPMENT
IN HIGHER EDUCATION

BERKELEY, CALIFORNIA 94720

January 14, 1972

The Center for Research and Development in Higher Education is engaged in a major research program which looks into educational strategies which have been developed to assist "new" students in higher education — students drawn mainly from the ranks of the economically and educationally disadvantaged and from ethnic minority group segments of the population. These students, hitherto under-represented in postsecondary education, will contribute significantly to the projected growth in college enrollments.

We know that many colleges have attempted to meet the needs of these "new" students by introducing special programs in counseling and tutoring, but there is little accurate information about their extent and design. To overcome this lack, we are asking for your help in obtaining information about what colleges with substantial numbers of "new" students do in their formal tutoring programs. Our concern here is with tutoring programs — those which serve primarily "new" students — as opposed to a tutoring service which is available to the entire college population. Your institution has been selected because it has been identitifed as one that has given special attention to the development of a tutoring program.

We realize that putting yet another questionnaire before you is an imposition, but we would be grateful if you would take time to answer a few questions about your institution and the tutoring program you have developed to respond to your population of "new" students. If you have prepared descriptive or evaluative materials pertaining to it, we would like very much to have copies of them. Please return all materials to us in the enclosed stamped envelope.

When the results of the survey have been tabulated we will send you a copy of the findings. We appreciate your assistance greatly.

Sincerely,

E. L. Klingelhofer
Program 10 Coordinator

ELK: bjl
Enclosure

Please use a separate questionnaire for each tutoring program designed for educationally disadvantaged students.

I. Name of institution_____

Address_____

_____

Name of Program_____

Director_____ Title_____

Campus Address_____

_____

Phone Number_____
Area Code Telephone Number Ext.

II.

1) When was this program initiated?_____

2) By whom initiated

_____Faculty

_____Students

_____Counselors

_____Administrators

_____Others; Please indicate_____

_____

_____

3) Did program originate from an existing program (e.g., SEEK, EOP, Upward Bound, etc.)? _____ Yes _____No

If yes, please specify_____

_____

_____

_____

4) What is the budget for this tutorial program for the current academic year?_____

5) What is the source of funds? Please indicate percent available from each of the following:

_____Federal

_____State

_____Local

_____Other; please describe_____

_____

_____

_____

6) How many staff people are involved in the tutoring program (excluding peer tutors)?

_____Full time

_____Part time

7) How strongly do you feel the program is supported by faculty?

☐ Very enthusiastic

☐ Moderately enthusiastic

☐ Tolerant

☐ Unsupportive

How strongly do you feel the program is supported by administrators?

☐ Very enthusiastic

☐ Moderately enthusiastic

☐ Tolerant

☐ Unsupportive

8) Where does most tutoring take place?_____

_____

Is this facility used for other services? _____Yes _____No

If yes, what are the other services?_____

_____

_____

9) In which academic subjects is tutoring offered? Please list in order of number of tutees served.

1._____ 4._____

2._____ 5._____

3._____ 6._____

III.

10) How many tutors were involved in this program (Fall session, 1971)?

Peer_____

Faculty_____

Paraprofessional_____

11) Approximately how many tutors belong to ethnic minority groups?

	Peer	Faculty	Para-professional
Black			
Chicano			
Asian			
Native American			
Other; please specify_____			
_____			
_____			

12) What are the criteria for peer tutor selection (e.g., GPA, class standing, financial need, volunteers, etc.)?

_____

_____

_____

How are peer tutors selected (e.g., by program director, etc.)?

_____

_____

_____

13) How are peer tutors compensated? (Please check all that apply)

☐ Academic credit

☐ Financial. What is the hourly rate of pay?_____

☐ Other; please describe_____

_____

_____

14) Is there a peer tutor training program?

☐ Yes

☐ No (If no, skip to Question 17)

15) Who does the training?_____

_____

_____

16) What are the characteristics of the training program? Check all that apply.

☐ Initial orientation. How long?_____

Please describe_____

_____

_____

_____

☐ Continuing training throughout the term. Please describe

_____

_____

_____

☐ Other; please describe_____

_____

_____

_____

IV.

17) How many tutees were involved in this program (Fall session, 1971)?

_____

18) Approximately how many tutees are members of ethnic minority groups?

Black_____

Chicano_____

Asian_____

Native American_____

Other; please specify_____

_____

_____

19) How are tutees selected?

☐ Mandatory

☐ GPA; please specify_____

☐ Test scores; please specify_____

☐ Voluntary

☐ Other_____

_____

20) How is tutoring conducted?

☐ Group sessions

☐ Individually

21) When is tutoring considered completed?

☐ Upon passing a test or demonstrating proficiency

☐ Upon being excused or recommended for more advanced work

☐ Upon spending a specific amount of time in the program

How much time?_____

Thank you for filling in this questionnaire. Please return immediately using the envelope provided.

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CENTER FOR RESEARCH AND DEVELOPMENT IN HIGHER EDUCATION

BERKELEY, CALIFORNIA 94720

TUTOR PROGRAM

Interview Schedule

I. General Background Information (to be answered by administrators, program director, tutors, and tutees)

1. Respondent _____

2. Position _____

3. Sex: ☐ Male ☐ Female

4. Respondent's age _____ (if possible)

a) under 30 _____
b) 31 - 40 _____
c) 41 - 50 _____
d) over 50 _____

5. Ethnic group _____

6. Academic Rank:

Professor _____
Assoc. Professor _____
Asst. Professor _____
Instructor _____
Lecturer _____
Other _____

Student Classification:

Freshman _____
Sophomore _____
Junior _____
Senior _____
Graduate _____
Other _____

7. Academic Field _____

7. Highest degree earned _____

From what institution _____

8. Appointment: ☐ Full-time ☐ Part-time

9. Number of years on campus _____

10. Number of years associated with the program _____

probe ⟶ in what capacities

II. Program Information

A. To be answered by Administrators and Program Director

11. How did the tutorial program originate?

12. What groups or individuals were most influential in establishing the tutorial program?

13. How long has the program been in operation?

14. What obstacles had to be overcome in implementing the program?

probe ——→ how was the program financed?

probe ——→ what academic approval was needed?

15. What are the goals of the tutorial program?
probe ——→ have they been achieved?
16. Are there any plans for modifying types of services offered?

probe ——→ Staffing?

probe ——→ Number of students served?

B. To be answered by Program Director

17. Are there student attitudes or behaviors that this program attempts to change or modify (fear of failure, test anxiety, self-concept, etc.)?

probe ——→ how is this done?

18. How are tutees selected?

19. Do tutees resent being singled out for special treatment?

a) Is there a negative stigma associated with being a tutee in the program?

probe ——→ How is this negative stigma minimized?

probe ——→ How effective is this attempt?

20. How is the problem of tutee dependency handled?

21. How are tutors selected?

probe ——→ peers; faculty; paraprofessionals

22. Is there a problem in securing tutors?

probe ——→ any particular group, i.e., students, faculty, paraprofessional?

probe ——→ a) salary
b) status and mobility
c) second class faculty position

23. Is there a tutor training program which attempts to sensitize tutors to the special needs of tutees?

24. Is ethnic group congruency important in the tutor-tutee relationship?

25. Where does tutoring take place?

26. Is the physical facility (building (s)) adequate for this program?

probe ——→ is the facility under-utilized? over-utilized?

What is the condition of this facility?	
_____old	_____new
_____well kept	_____sloppy
_____attractive	_____depressive

(Observation by interviewer)

C. To be answered by Tutors

27. What are the goals of the tutorial program?

28. Are there student attitudes or behaviors that this program attempts to change or modify (fear of failure, test anxiety, self-concept, etc.)?

probe ——→ how is this done?

29. How are tutees selected?

30. Do tutees resent being singled out for special treatment?

a) Is there a negative stigma associated with being a tutee in the program?

probe ——→ How is the negative stigma minimized?

probe ——→ How effective is this attempt?

31. How is the problem of tutee dependency handled?

32. Is there a tutor training program which attempts to sensitize tutors to the special needs of tutees?

33. Is ethnic group congruency important in the tutor-tutee relationship?

34. Do you feel that tutees are really helped in this program?

35. Has being a tutor helped you in any way? How?

D. To be answered by tutees

36. What are the goals of the tutorial program?

37. How did you get into the program?

a) Do tutees resent being singled out for special treatment?

b) Do you feel there is a negative stigma associated with being a tutee in the program?

probe ——→ How do you off-set that stigma?

probe ——→ How effective is this attempt?

38. Is ethnic group congruency important in the tutor-tutee relationship?

39. Do you feel that tutees are really helped in this program?
probe ——→ How?

III. Program Evaluation to be answered by all

40. Are you satisfied with the operation of the tutorial program?

probe ——→ Why? Why not?
probe ——→ Strengths; difficulties

41. In your estimation, are most tutors, administrators, faculty and students satisfied with the program?

42. (For tutors and tutees only) Does the program serve as many students as you feel it should?

probe ——→ approximate number of students on campus who could benefit from the program?

43. If more than one category of tutors (peers, faculty, or paraprofessionals) are used, which group do you feel is more effective in this tutoring program? Why?

44. What constitutes the successful tutee completion of the program?

probe ——→ In your estimation what percentage of tutees successfully completed the program in the first half of this academic year?

45. Do you feel this program will continue?

probe ——→ Do you feel this program should continue?

probe ——→ Is the program growing?

46. If you could make any changes you desired, what would you do?

IV. Budget [to be answered by Program Director]

47. Do you feel the budget is adequate for this program?

48. How are tutors compensated?

a) _____peer; if used?

probe ⟶ If academic credit, what is minimum or maximum number of units that can be earned?

b) _____faculty; if used?

probe ⟶ Is it possible to have a reduced teaching load as compensation?

c) _____paraprofessional, if used?

probe ⟶ If pay, what is the rate for each group?

49. Do you feel that the compensation for peer, faculty, or paraprofessiona tutors is adequate?

probe ⟶ If not, why not?

50. Is the lack of funds a problem?

51. If the program were to receive extra funding how would it be spent?

V. Institutional Commitment [to be answered by all]

52. Who makes most curriculum/program/operational decisions on this campus?

Board of Trustees_____
Administrators_____
Faculty_____
Students_____
Any combination of the above_____

53. Do the faculty, students and administrators care a lot for this school?

probe ⟶ Which group cares most?

54. What is the feeling of faculty, students and administrators toward the tutorial program?

55. Could you describe any incident that demonstrates the feeling of the faculty, students or administrators toward the tutoring program?

VI. Other [to be answered by all]

56. Is there any question you would like to ask or anything else concerning the tutorial program you would like to discuss?

APPENDIX C

BRIEF DESCRIPTION OF THREE PROGRAMS

Program A

The Learning Center Program at this college is composed of reading and writing laboratories. Services available in the program include tutoring, diagnostic testing of reading and writing skills, development of individualized programs for improvement of reading and writing skills, and use of audio-visual equipment. Many of the students enrolled in the full program are referred to the Learning Center by teachers, while other students primarily use the tutorial and audio-visual services on a voluntary "drop-in" basis.

The program is operated by a director and five faculty members with the assistance of ten paraprofessional staff members (assistant instructors) and 28 peer tutors. All of the faculty members have Master of Arts degrees, and several have continued graduate study beyond the Masters degree level.

To a certain extent, the success of the program is probably due to the dynamic enthusiasm of the director and several of the faculty members. These same individuals were responsible for the formulation and development of the program. It is also evident that the assistant instructors and peer tutors have been infected by this enthusiasm; sincere concern for the students and a desire to help students improve reading and writing skills is very apparent in the majority of individuals concerned with the program.

However, enthusiasm and concern alone cannot account for a successful program. Institutional commitment (particularly at the higher administrative levels) and an adequate budget have enabled the director and faculty members to develop and continue the program at a high level of sophistication. The budget has made possible the extensive use of computer programs for management and record-keeping aspects of the program, the purchase of a considerable amount of audio-visual equipment, and staffing the laboratories with well-qualified assistant instructors and peer tutors.

The assistant instructors and peer tutors capably perform the tutorial and testing aspects of the program because they are well-qualified and able individuals when first hired for the positions. All of the assistant instructors and several tutors have received college degrees; the remaining peer tutors attend either a local four-year college or this particular college. An extensive initial and continuing training program furthers these abilities and provides training for specific tutorial and testing skills.

Perhaps one of the important factors accounting for the success of the Learning Center Program is the pervasion throughout the program of attention to detail. All aspects of the program were carefully considered. Rather than being hurriedly put together, the program emerged after considerable thought and numerous discussions. This attention to detail is seen in the individualized programs which are developed for each student, the diagnostic testing which is provided, and the composition of the Learning Center staff, which covers the range from specialists in reading or writing to specialists in developing diagnostic tools.

While the Learning Center Program has the support of the administration and the majority of faculty members and students on campus, there is some dissension from the faculty of the English department. This group of opposing faculty members is small and has not seriously undermined the program in any observable way. However, any faculty member opposed to the program is not likely to refer students who need help to the Center and this lessens the probability that students deficient in reading and writing skills will go to the Learning Center Program for tutorial and testing assistance. While this opposition from the English department does not seem to be affecting the program as a whole, it is negatively affecting some students.

Program B

This institution inaugurated an educationally innovative program geared to the special needs of Black and Chicano students after student pressures culminated in a strike in 1970.

In response to the demonstrated needs of the minority students, the University administration allocated $69,000 for operation of the program's first year and subsequently increased that budget to $100,000.

The philosophy of the Coalition for the Use of Learning Skills (CULS) is that social pressures would dictate a constant threat to the educational success of the Black student. CULS emphasis, through study groups, group and individual counseling, and tutoring, is to create an educational atmosphere conducive to the full and enthusiastic support by the minority student.

Study groups are organized for a wide range of basic and often difficult courses. Typical courses have included anthropology, botany-zoology, chemistry, economics, French, math, physiology, Spanish, and engineering.

Of key importance to implementing the CULS philosophy is the process of training students to train others. In the spring of 1971 there were 20 study group leaders, 14 counselors, three skills assistants, and eight teaching fellows who worked with approximately 350 students. The majority of these staff persons are graduate students who offer assistance in their own academic discipline. Additionally, the study leaders provide supportive services, academic counseling, and instruction in note-taking, research techniques (library use), vocabulary building, test-taking preparation, and other services that might not otherwise be provided by the institution.

Through regular evaluations conducted by the CULS staff, it was generally felt by the program

participants that study groups permit more individualized assistance and that study group leaders give more comprehensible explanations than regular instructors, that study groups encourage interaction with other students, allowing one to give help and receive help, and that study groups offer learning skills.

Our observations of CULS operation corroborated their reports that the educational experience of many students was greatly enhanced by CULS.

Staff personnel of CULS were diligent and enthusiastic in their efforts to provide a more meaningful educational experience for this program's participants.

Dialogue with student participants disclosed that one of the most valuable aspects of the study group for students is the individualized help they are able to receive. This does not mean that a tutorial arrangement could necessarily be substituted for the study group experience with equal benefits. Students frequently reported that study groups were uniquely valuable to them because the sessions were structured to facilitate "collective interchange of ideas with those at varying levels of understanding." Also, students feel freer to participate in discussions and ask questions in study groups than they do in regular classes.

The faculty and administration of the University are outwardly receptive of CULS' philosophy and programming. There is the general tendency of the faculty to depict CULS as a remedial program in intent and activity, which it is not. However, for those faculty members who have been more than remotely associated with CULS, praises and appreciation for the program have been common.

Some reports from faculty members verify the program's effectiveness in increasing the motivation and level of academic achievement of a significant

number of its participants. Many faculty members also offered high praise for the competence and enthusiasm demonstrated by the program director and the graduate level study leaders. It is our feeling that the philosophy of CULS has created a sense of community that provides for unusual dedication by the entire strata of participants.

There is a steady flow of communication between the several colleges of the University and the central administration. Due to the nature of the program inception, some tension exists between the administration and CULS staff. In spite of this tension, the administration recognizes the value of the program to minority students and has made the budgetary provision for the continuation of the program for at least the next few years.

Program C

Project TOGETHER is a program funded by the U. S. Office of Education, Department of Health, Education and Welfare.

Project TOGETHER is designed to help identify, matriculate, educate, graduate, certify, and place in productive employment those students whose opportunities for postsecondary education have been abridged in the past.

The purpose of the Project is to utilize and reinforce all those existing services and programs which satisfy basic needs, and to add to those any new services and programs which needs prescribe.

The specific target population of TOGETHER are students with combinations of the following characteristics:

1) Students from low-income backgrounds
2) Students with inadequate high school preparation

3) Students who are the recipients of welfare assistance

4) Students who live in public housing under low-income rent-subsidy provisions

5) Students for whom standard English is a second language

6) Students whose cultural heritage is not represented sufficiently or accurately in the traditional curriculum.

Although the majority of 185 participants are Black, project TOGETHER employs and works with all students who desire the program's services.

One of the greatest needs expressed by Project participants is for tutoring and counseling. Project TOGETHER has addressed these needs by developing an expanding peer-tutoring service.

Unique features of this program include an interview with the potential tutee to inform him of his responsibilities in a tutor-tutee relationship. Additionally, Project TOGETHER staff try to determine if the student has needs beyond specific academic assistance. In those cases that require it, the student is then aided in the area of his need.

Although the Project is one of only 100 such programs in the nation, TOGETHER is distinctly different from the others because it goes much further in its work for minority students.

The Project's coordinator, a former school teacher, says that they do basically the same things the other programs do in terms of tutorial assistance. She feels that where TOGETHER significantly differs is in the intense personal involvement in every TOGETHER student's success or failure.

The program was initiated by its present director and two university professors. It began as a volunteer

program in 1967 but because of its successes and because one program had financially destitute students helping equally destitute students, efforts to find funding were begun.

The program received $100,000 from HEW for the 1970-71 year and was refunded for that amount in 1971-72 and 1972-73.

The attrition rate of program participants is well below the national averages for colleges. There were 240 students involved during the first semester and only four were unable to return. During the second semester there were 374 students and the loss was less than 10 percent. The national average for students withdrawing from college is close to 30 percent.

Tutoring, offered in every major area, is conducted on a one-to-one basis with group-sessions help in certain subjects where necessary. Tutors are selected on the basis of their knowledge of the material, their ability to relate to tutees, and their financial need.

Tutors undergo in-depth orientation sessions with TOGETHER staff which give them helpful insights into various tutoring techniques and alert them to difficulties they might encounter. Additionally, both tutor and tutee complete regular evaluations of one another's performance. Where there is criticism by one or the other, TOGETHER staff review the relationship in an effort to pinpoint and rectify the situation.

If one component of Project TOGETHER can be isolated as the major determinant of success, it probably is the infectious commitment displayed by the director and entire staff.

As in the case of Program B, participants of Project TOGETHER are painfully aware of the pressures on minority students and are dedicated to mediating some of those pressures through academic assistance as well as social support.

To date, the University faculty and administration share the enthusiasm of the program's staff. Because it is federally funded, the University has not had to make any financial commitment to verify their support but that time will come when federal funds wane.

APPENDIX D

SAMPLES OF TUTOR AND TUTEE INFORMATION HANDOUTS

Prepared by Frank G. Douthwaite
Director, Tutorial Services

SINCLAIR COMMUNITY COLLEGE
140 S. Perry St.
Dayton, Ohio
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From: Office of the Director of Tutorial Services*

To: All Tutors

Subject: Suggestions to Assist You in Your Tutorial Duties

Tutoring is essentially an individual experience; the interrelationship of two individuals working closely together. In this relationship there is no one method, no easy answer. The most success will be found with methods which you develop yourself while working with the student. Any method which helps your tutee will be considered the best method. Tutoring tips presented here summarize suggestions which other tutors have found helpful. They are intended to serve as a guide to you in your work.

PURPOSES OF TUTORING

1. To bolster the student's self-image, self confidence and hope, providing for as many "success" experiences as possible.

2. To help the student expand basic skills and awareness needed to have the maximum amount of success in dealing with his life situation (school, home, community).

3. To widen the horizons of the student by involving him in real experiences. (Any situation can become a learning experience if the dimensions of it are thought about, talked about, expanded upon.)

COMMITMENT

Tutoring is serious business. "A tutor who is late, who skips sessions, who 'drops out' is a great disappointment to a tutee who has faith and confidence in him."

TIPS FOR THE FIRST SESSIONS

1. Be sure that you and your tutee have names straight. Learn nicknames, if any. It will help to write down your name and give it to your tutee. Students are often hesitant to communicate with tutors when they are uncertain of names. In addition, exchange telephone numbers for emergency communications.

2. To build rapport, talk with the tutee about his interests and, above all, listen. Respect the tutee as an individual with a distinct personality of his own. Appreciate his interests and accept him as he is. Reserve judgments.

3. Devote most of the first session to getting to know the tutee as a person. After a few sessions you should know him fairly well.

4. Begin tutoring at a level well within the grasp of the tutee. This will provide an atmosphere of success. Remember, many tutees have had little success in school and need rewarding experiences to restore their self-assurance. This atmosphere will build the student's confidence.

TIPS FOR LATER SESSIONS

1. In general, the less work you do for your tutee the better. Although it is quicker, easier, and less frustrating for a tutor to do a problem, it is of little permanent help to the student. Help him learn HOW to do his own work.

A good tutor will spend most of the time ASKING QUESTIONS, LISTENING, AND HELPING THE TUTEE TO THINK FOR HIMSELF, rather than lecturing to him.

2. Move on to more challenging material as soon as you have established a working relationship. Once you feel the tutoring is going well don't be guilty of under-expectation. If you expect little from your tutee, he will produce little. Let him know you have high expectations for him. With this encouragement he may come to have the same expectations for himself.

3. We have arranged so that tutoring sessions will normally not exceed one hour. If you find it more practicable to arrange for shorter sessions, consult with the Director of Tutorial Services to arrange this.

4. To the extent possible, be creative and imaginative in your tutoring methods. Look for ways to motivate your tutee and to involve him in the activity.

5. Plan with your tutee as well as for him.

6. Be sensitive to special problems which may be affecting the young person.

7. Resist the temptation to criticize the schools as a means of identifying with the tutee. If you have questions regarding the school's instructional program, its policies and procedures, bring them to the attention of the Director of the program.

Suggestions for Tutors

CAUTION:

Tutoring is a way of trying to help other people. It is not difficult, in trying to help others, to do more harm than good. People who offer help in a patronizing or condescending way easily can compound the very feelings of inadequacy they are trying to help the other people overcome.

To reduce this danger, there are several approaches in helping young people which have proven valuable in other tutoring projects.

1. One way to avoid a patronizing tone is to relate to your tutee as an equal. Do this in the sense that you and he are human beings with problems and a future to face. Think of working with your tutee, rather than talking at him.

2. Avoid thinking of yourself, and talking to others, as the giver and the helper, or in the extreme as the saviour from the outside with the answers to all the problems of the educationally or environmentally disadvantaged.

3. Don't expect your tutee to show appreciation for your efforts before you have become a friend. One tutor destroyed whatever relationship he had developed with his tutee by repeating on two occasions, "Here I am traveling 10 miles twice each week to help you out of your difficulties and you haven't even finished your homework for me."

4. Empathy is an important quality to seek if you are tutoring. Have enough understanding of your tutee and knowledge of his background and possible cultural differences so that you accept him as he is, rather than reject him because he is not what you think he ought to be. Be willing to start at his level and take his pace.

5. Be sensitive in communicating with your tutee. More than anything, this means being a careful listener.

6. Above all, be aware of who you are. Examine your motivations. Be yourself and be honest in your relationship with your tutee.

7. Don't take all reactions personally; they may be directed against society and the chance to release them is meaningful.

SINCLAIR COMMUNITY COLLEGE
TUTORIAL PROGRAM

for
S T U D E N T S

POLICIES CONCERNING TUTORIAL PROGRAM FOR STUDENTS BEING TUTORED

This is a compilation of pertinent facts, policies and procedures concerning the Tutorial Program. These policies must be adhered to by all students being tutored.

EACH STUDENT SHOULD REALIZE THAT HIS INSTRUCTOR IS HIS PREIMARY SOURCE OF INFORMATION FOR THE COURSE. All problems should be discussed with the appropriate instructor. Frequently students may receive academic assistance from their instructor which will preclude tutorial assistance. It would be appropriate for each student to discuss his academic difficulties prior to "signing up" to be tutored.

PLEASE REMEMBER THAT YOU ARE NOT ELIGIBLE TO BE TUTORED UNLESS YOU ATTEND YOUR CLASSES REGULARLY.

NUMBER OF HOURS -Each student will be tutored a maximum of two hours for each subject for which they are enrolled to be tutored. Students normally may be tutored for only two subjects. However, permission may be granted for additional subjects or additional hours and will be considered by the Director of Tutorial Services and the Dean of Instruction after consultation with the instructor of the student or students involved.

If, at any time, you feel that you will no longer benefit from tutoring and you do not wish to be tutored further, please advise your tutor or Mrs. Pratt immediately, so that another student can be tutored.

NUMBER OF STUDENTS PER TUTORING SESSION - Students may be tutored in groups not to exceed two. In grouping students for tutorial sessions, consideration will be given to student ability, instructor, subject matter, etc.

REPORTING INSTRUCTIONS - Students who have applied for a tutor should keep in contact with Mrs. Pratt after applying. Students may call Extension 52 or report to the Tutorial desk within three days after application. This is important!

Also, please check Bulletin Board frequently for messages.

ATTENDANCE - Students are expected to meet all scheduled tutorial sessions. In the event of emergency, sickness, etc., which may preclude attendance or result in tardiness, the student will call his tutor or Mrs. Pratt (Administrative Assistant) Extension 52, as soon as possible. Each session is normally scheduled for one hour and each student will be expected to spend the whole period with the tutor.

STUDENT PROGRESS REPORTS - Each tutor will report on the progress of students being tutored every two weeks. This report will include information concerning attendance, attitude, etc. A copy of the progress report will be sent to the appropriate Instructor and one copy will remain in the files of the Tutorial Program.

STUDENT ATTITUDE -Every student participating in the program will be expected to approach each tutorial session with the objective of gaining as much academically from each session as possible. He should be prepared to discuss his subject with his tutor, ask pertinent questions, etc. The tutor will not do "homework" for the students but will assist in every way to help him understand the subject. The tutors are paid by the hour for assisting in this program and are expected to maintain a professional approach toward their duties. The proper attitude on the part of the student will aid immeasurably.

TUTORIAL ADMINISTRATION - Students having questions concerning any problems with the Tutorial Program which cannot be answered by their tutor should contact Mrs. Pratt, 4th Floor, YMCA, or Mr. Douthwaite, Director of Tutorial Services.

APPENDIX E

SAMPLES OF FORMS USED FOR:
1) TUTOR SCREENING
2) REQUEST FOR TUTORING

APPLICATION FOR STUDENT ASSISTANT

TUTORING PROGRAM

NAME _____

ADDRESS _____

TELEPHONE # _____

SOCIAL SECURITY # _____

AREA YOU WISH TO TUTOR IN: VERBAL MATH BIOLOGY CHEMISTRY
FOREIGN LANGUAGE (SPECIFY) _____
OTHER _____

LIST COURSES YOU HAVE TAKEN IN THIS AREA:

_____

_____

OTHER QUALIFICATIONS:

_____

_____

_____

_____

_____ _____
SIGNATURE DATE

FACULTY RECOMMENDATIONS:

_____

_____

_____

_____

_____

APPLICATION FOR TUTORING Date_____

NAME_____ ARE YOU A VETRAN? YES ( ) NO ( )

Course or area to be tutored in: give course and section no.)_____
Instructor of course:_____
Preferred hours for tutoring:_____ Assigned hours:_____

CONTRACTUAL AGREEMENT: If a student misses more than two tutoring sessions without contacting his/her tutor, he/she will automatically be dropped from the program.

Course instructor's comments:

YES	NO	
( )	( )	Student is making a sincere effort to pass this course.
( )	( )	Student can probably profit from tutorial assistance.
( )	( )	Student is educationally deficient in this subject area.
( )	( )	Particular instructions for tutor--if "yes", please use reverse side.

Tutor's comments:

YES	NO	
( )	( )	Student regularly keeps appointments.
( )	( )	Student is making progress.
( )	( )	Student is sincerely cooperative.

INSTRUCTIONS FOR TUTORING SERVICE

1. Student is responsible for bring his own textbook, assignments, test papers, or any other material pertinent to the success of the tutoring session.
2. Student should contact his/her tutor or the tutoring office if he/she will miss a tutoring session. Failure to do so will result in expulsion from the program, as by the above contractual agreement.
3. Please write class schedule below including section and room numbers.
4. Vetrans should proceed to Room M104 and complete part of VA Form 21E-19901.

STUDENT SCHEDULE

M-W-F	Room	//	T-T	Room
8:00-8:50		//	8:00-9:15	
9:00-9:50		//	9:25-10:40	
10:00-10:50		//	10:50-12:05	
11:00-11:50		//	12:15-1:30	
12:00-12:50		//	1:40-2:55	
1:00-1:50		//	3:05-4:20	
2:00-2:50		//		
3:00-3:50		//		

Other Center Publications:

Public Universities, State Agencies, and the Law: Constitutional Autonomy in Decline, by L A. Glenny and T.K. Dalglish. $4.50

The Campus Senate: Experiment in Democracy, by H. L. Hodgkinson. $3.00

Educational Characteristics and Needs of New Students: A Review of the Literature, by E.L. Klingelhofer and L. Hollander. $4.25

From Elite to Mass to Universal Higher Education: The British and American Transformations, by T.R. McConnell, R.O. Berdahl, and M.A. Fay. $3.50

Evaluating University Teaching, by M. Hilderbrand, R. Wilson, and E. Dienst. Included is 32 page *User's Manual and Sample Survey Instruments*. $2.00

The Global Quest for Educational Opportunity, by L.L. Medsker. $3.00

Urban Multi-unit Community Colleges: Adaptation for the '70s, by E.G. Palola and A.R. Oswald. $3.00

Coordinating Higher Education for the '70s: Multi-campus and Statewide Guidelines for Practice, by L.A. Glenny, R.O. Berdahl, E.G. Palola, and J.G. Paltridge. $2.50

Public and Proprietary Vocational Training: A Study of Effectiveness, by Wellford W. Wilms. $5.00

National Merit Students in College, by Fred T. Tyler $6.00

These publications are available from: Publications Department, Center for Research and Development in Higher Education, University of California, 2150 Shattuck Avenue-5th Floor, Berkeley, California 94704.